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THIRTEENTH ANNUAL REPORT
OF THE
WATER COMMISSIONER



FOR THE YEAR ENDING
JANUARY 31, 1908

№ 6355.52

1907-08



Boston Water Commissioner.

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THIRTEENTH ANNUAL REPORT

OF THE

WATER COMMISSIONER

FOR THE

YEAR ENDING JANUARY 31, 1908

Printed for the Department



BOSTON
MUNICIPAL PRINTING OFFICE
1908

6388.52
cont.

Boston Water Commissioners
Jan. 29. 1910

1007.06

W. H. Hall & Son
and Co.
Boston

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OFFICE OF THE WATER COMMISSIONER,
CITY HALL, BOSTON, December 28, 1908.

HON. GEORGE A. HIBBARD,

Mayor of the City of Boston:

SIR, — I submit herewith under head of "Thirteenth Annual Report of the Water Commissioner" such data as I have had prepared covering the fiscal year ending January 31, 1908. As I did not receive my appointment as Water Commissioner until April 27, 1908, I am not in a position to comment upon the operations of the Water Department prior to that time, and therefore I will only say that the statements submitted, while not fully in conformity with the suggestions made by the Finance Commission, have been made up as far as possible along the lines recommended.

Respectfully,

WILLIAM E. HANNAN,

Water Commissioner.

The receipts and disbursements of the department for the year were as follows:

Total receipts from all sources	\$2,662,468 62
Balance at beginning of year, loan	\$16,365 90
Balance at beginning of year, tax levy	54,739 39
	<hr/>
	71,105 29
Total	\$2,733,573 91
Total expenditures for all purposes	<u>\$2,733,573 91</u>

TOTAL RECEIPTS OF THE YEAR BY SOURCES.

Sales of Water	\$2,558,614 34
Service, elevator, fire, motor and stand pipes, and repairs, labor, materials, etc.	60,713 39
Fees for summonses	1,852 56
Shutting off and letting on water on account of repairs	1,790 00
Difference on cost of laying main pipes	1,349 00
Shutting off and letting on water on account of non-payment of bills	1,104 00
Use of West Roxbury pumping plant	773 40
Interest on deposits	343 08
Use of land	50 00
	<hr/>
Transfer by City Auditor to meet deficiency	\$2,626,589 77
	<hr/>
	35,878 85
	<hr/>
	\$2,662,468 62

EXPENDITURES.

Current expenses	\$646,191 07
Extension of mains, etc., from loan	\$16,365 90
Extensions of mains, etc., from revenue	165,000 00
	<hr/>
	181,365 90
Metropolitan water assessment	1,726,588 68
Interest on funded debt	178,217 66
Refunded water rates	1,210 60
	<hr/>
	\$2,733,573 91

Details of expenditures under the appropriation for current expenses for the fiscal year ending January 31, 1908. (From revenue and transfers.)

Salaries and wages:

William J. Welch, commissioner	\$5,000 00
Assistant Commissioners:	
Isaac Rosnosky	3,000 00
Joseph J. Norton	3,000 00
James P. Lennon	3,000 00
Walter E. Swan, chief clerk	3,000 00
John J. Feneno, secretary, to January 15, 1908	2,335 60
Employees	454,110 56
	<hr/>
	\$473,446 16
Water pipes and other castings	72,984 26
	<hr/>
Carried forward	\$546,430 42

WATER DEPARTMENT.

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<i>Brought forward</i>	\$546,430	42
Stable:								
Hay, grain, straw	\$8,991	72	
Vehicles and repairs	3,414	42	
Horseshoeing	.	.	.	.	.	2,341	24	
Harnesses and repairs, etc	.	.	.	.	.	1,648	50	
Horses, purchase of	.	.	.	.	.	900	00	
Veterinary services, etc.	.	.	.	.	.	685	00	
							17,980	88
Meters:								
New meters	.	.	.	.	.	\$11,920	00	
Repairs and extra parts	.	.	.	.	.	2,473	36	
Tools, machinery, and repairs of same, iron, steel, hardware and small supplies	.	.	.	.	.	12,624	85	
Blasting and excavating pipe trenches	.	.	.	.	.	9,947	13	
Lead and lead pipe	.	.	.	.	.	8,724	39	
Traveling expenses and transportation of employees	.	.	.	.	.	5,065	64	
Lumber	.	.	.	.	.	4,924	75	
Printing	.	.	.	.	.	4,085	95	
Repairs and alterations of buildings, streets and structures	.	.	.	.	.	4,080	63	
Fuel	.	.	.	.	.	2,384	71	
Salt	.	.	.	.	.	1,784	40	
Stationery, postage, etc	.	.	.	.	.	1,521	25	
Telephones	.	.	.	.	.	1,191	91	
Gravel and crushed stone	.	.	.	.	.	955	50	
Rents	.	.	.	.	.	850	00	
Teaming and freights	.	.	.	.	.	722	70	
Furniture	.	.	.	.	.	669	31	
Cement and sand	.	.	.	.	.	423	50	
Oils	.	.	.	.	.	412	81	
Gas	.	.	.	.	.	374	24	
Taxes	.	.	.	.	.	307	80	
Bricks	.	.	.	.	.	251	30	
Waterproof clothing	.	.	.	.	.	224	73	
Bubble fountain	.	.	.	.	.	125	00	
Salt hay	.	.	.	.	.	90	06	
Advertising	.	.	.	.	.	42	90	
Ice for office	.	.	.	.	.	40	60	
Professional and expert services	.	.	.	.	.	25	00	
Premium on surety bonds	.	.	.	.	.	20	00	
Recording papers	.	.	.	.	.	18	00	
"Old Home Week" decorations	.	.	.	.	.	8	27	
Commission, Justice of Peace	.	.	.	.	.	7	00	
Drain pipe	.	.	.	.	.	2	09	
Moth extermination	.	.	.	.	.	1	91	
Damages	.	.	.	.	.	\$640,712	99	
						5,478	08	
						\$646,191	07	

Details of expenditures under the appropriation for Extension of Mains, etc., for the fiscal year ending January 31, 1908:

Employees	.	.	.	.	.	\$46,914	81
Water pipes and other castings	.	.	.	.	.	75,401	47
Blasting and excavating pipe trenches and laying water pipes	.	.	.	.	.	33,039	76
<i>Carried forward</i>	.	.	.	.	.	155,356	04

<i>Brought forward</i>		\$155,356 04
Water pipe trestle and fender guard at Congress-street bridge, Cahill Construction Company	.	7,545 97
Lumber	.	4,271 79
Lead and lead pipe	.	3,796 36
Teaming and freights	.	3,693 39
Repairs and alterations of streets, structures, etc.	.	3,065 27
Tools, iron, steel and hardware	.	1,783 97
Fuel	.	936 50
Transportation of employees	.	440 40
Bricks	.	222 75
Cement and sand	.	108 71
Oils	.	103 70
Drain pipe	.	23 05
Gravel and crushed stone	.	18 00
		<u>\$181,365 90</u>

There was also expended by the Water Department, under an appropriation of \$5,000, from the Reserve Fund, for ice for drinking fountains (order of City Council, approved May 27, 1907):

Ice	.	\$3,840 90
Advertising	.	64 95
		<u>\$3,905 85</u>

COST OF CONSTRUCTION AND CONDITION OF THE WATER DEBT.

Cost of construction of Waterworks to February 1, 1907	.	\$16,854,619 62
Cost of construction of Waterworks to February 1, 1908	.	17,074,859 19
		<u>\$220,239 57</u>
Stock on hand February 1, 1907	.	\$141,160 93
Stock on hand February 1, 1908	.	165,453 29
		<u>\$24,292 36</u>
The outstanding Water Loans February 1, 1907, were	.	\$4,562,500 00
The outstanding Water Loans February 1, 1908, were	.	4,531,500 00
		<u>\$31,000 00</u>
The Water Sinking-Fund February 1, 1907, was	.	\$3,697,913 53
The Water Sinking-Fund February 1, 1908, was	.	3,794,779 37
		<u>\$96,865 84</u>
Net Water Debt February 1, 1907	.	\$864,586 47
Net Water Debt February 1, 1908	.	736,720 63
		<u>\$127,865 84</u>

WATER DEPARTMENT.

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The outstanding Water Loans on February 1, 1908, were as follows:

Loans.	Date of Maturity.	Amount.
5 per cent. Currency Loan, Due April, 1908	. . .	\$10,000 00
4 " " " Loan,	" July, 1909	65,000 00
4½ " " "	" Oct., 1909	268,000 00
4 " " "	" April, 1910	254,000 00
4 " " "	" April, 1912	324,000 00
4 " " "	" Oct., 1913	50,000 00
4 " " "	" Jan., 1914	459,000 00
4 " " "	" April, 1914	9,500 00
4 " " "	" Oct., 1914	10,000 00
4 " " "	" April, 1915	32,700 00
4 " " "	" Oct., 1915	17,000 00
4 " " "	" Jan., 1916	8,000 00
4 " " "	" April, 1916	18,500 00
4 " " "	" Oct., 1916	11,300 00
4 " " "	" Jan., 1917	8,000 00
3½ " " "	" April, 1917	275,000 00
4 " " "	" April, 1917	6,000 00
4 " " "	" Oct., 1917	158,700 00
4 " " "	" Jan., 1918	13,000 00
4 " " "	" April, 1918	300 00
3½ " " "	" July, 1918	100,000 00
4 " " "	" Oct., 1918	95,000 00
4 " " "	" April, 1919	200,000 00
3½ " " "	" Oct., 1919	2,000 00
4 " " "	" Oct., 1919	190,000 00
3½ " " "	" Nov., 1919	107,000 00
3½ " " "	" Jan., 1920	70,000 00
4 " " "	" Oct., 1920	181,500 00
4 " " "	" April, 1921	100,000 00
4 " " "	" Oct., 1921	140,500 00
4 " " "	" Jan., 1922	100,000 00
4 " " "	" April, 1922	75,000 00
4 " " "	" Oct., 1922	193,000 00
4 " " "	" Oct., 1923	18,275 00
4 " " "	" Oct., 1924	526,225 00
3½ " " "	" Oct., 1927	25,000 00
3½ " " "	" July, 1929	410,000 00
Total	. . . . .	\$4,531,500 00

SUMMARY.

3½ per cent. Loans	. . . . .	\$989,000 00
4 " " "	. . . . .	3,264,500 00
4½ " " "	. . . . .	268,000 00
5 " " Currency Loans	. . . . .	10,000 00
Total	. . . . .	\$4,531,500 00

COCHITIATE WATER SINKING-FUND RECEIPTS.

[Since the Establishment of the Board of Sinking-Fund Commissioners in 1871.]

YEAR.	From Tax Levy of City Income.	Interest on Investments.	Interest on Bank Deposits.	Water Rates, etc.	Premiums on Loans.	Other Sources.	Totals.
1871, April 30, received from Committee on Reduction of Debt	\$1,100,000 00	.....	.....	.....	.....	.....	\$1,100,000 00
1871-72.	Taxes, 14,325 00 9,375 00	\$61,000 00	.....	.....	.....	.....	85,049 67
1872-73.	9,000 00	70,137 50	1,017 80	.....	.....	.....	80,155 30
1873-74.	30,090 00	76,799 60	2,072 65	.....	.....	.....	108,962 25
1874-75.	75,973 28	82,842 25	2,121 13	.....	.....	.....	160,936 66
1875-76.	65,554 00	85,470 00	3,617 55	.....	.....	.....	155,027 55
1876-77.	234,814 00	86,245 66	4,119 47	\$26,480 18	.....	915 46	352,574 77
1877-78.	Taxes, 214,500 00	85,830 85	10,802 31	27,099 92	.....	.....	338,240 08
1878-79.	Taxes, 207,456 00	93,264 49	6,181 26	177,195 91	.....	9,874 21	493,971 87
1879-80.	.....	90,472 42	5,687 62	214,707 24	.....	4,411 64	315,278 92
1880-81.	.....	86,460 00	167 32	195,668 90	.....	1,762 04	284,058 26
1881-82.	.....	96,546 35	2,767 90	193,840 36	.....	494 08	293,648 69
1882-83.	.....	105,129 51	8,486 33	219,581 72	.....	1,241 04	331,438 60
1883-84.	Taxes, 973 00	138,120 90	2,268 22	.....	.....	.....	141,362 12
1884-85.	.....	143,049 45	7,510 40	209,258 39	.....	.....	359,818 24
1885-86.	.....	156,649 01	5,804 31	120,129 12	.....	442 27	283,069 71
1886-87.	Taxes, 75,496 00	181,264 89	2,644 70	297,928 95	5,081 12	562,415 66
1887-88.	199,883 90	4,178 16	221,620 11	425,682 17

WATER DEPARTMENT.

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1888-89.....	213,048 22	8,958 69	256,013 57	\$11,552 50	489,572 98
1889-90.....	223,000 83	11,730 60	300,903 00	36,092 50	576,726 93
1890-91.....	229,509 17	29,763 94	242,675 22	36,530 00	.....	538,478 33
1891-92.....	175,808 33	22,560 16	275,014 05	.....	78,865 00	552,247 54
1892-93.....	260,506 20	30,148 34	240,435 00	16,413 50	.....	547,503 04
1893-94.....	298,224 44	18,133 03	299,467 27	14,621 75	.....	630,446 49
1894-95.....	312,332 05	18,524 22	297,518 29	.....	9,894 12	638,268 68
1895-96.....	378,819 55	5,892 29	205,791 00	64,690 00	.....	655,192 84
1896-97.....	403,840 02	5,225 08	194,740 00	.....	616 50	604,421 60
1897-98.....	421,928 45	8,337 21	193,395 00	8,833 50	15,877 86	648,372 02
1898-99.....	417,142 02	5,806 85	193,395 00	.....	8,016 00	624,359 87
1899-1900.....	383,662 97	7,632 45	209,824 00	29,835 70	2,148 90	633,104 02
1900-1901.....	397,985 35	15,948 83	206,489 00	.....	* 609,000 00	620,423 18
1901-1902.....	325,030 96	31,199 25	.....	.....	965,230 21	.....
1902-1903.....	313,707 65	37,297 28	.....	.....	351,004 93	.....
1903-1904.....	149,255 27	8,318 82	.....	.....	157,856 19	.....
1904-1905.....	260,239 40	5,447 25	.....	.....	265,786 65	.....
1905-1906.....	242,176 39	13,015 36	.....	.....	255,191 75	.....
1906-1907.....	171,618 65	16,038 95	.....	.....	187,657 60	.....
1907-1908.....	126,325 04	2,064 84	.....	.....	128,389 88	.....
	\$2,037,556 28	\$7,548,372 74	\$371,947 24	\$5,016,171 20	\$218,569 45	\$749,308 34
						\$15,941,925 25

* Waterworks Fund.

Cochituate Water Debt, Gross and Net.

At the Close of Each Fiscal Year.

FISCAL YEAR.	Gross Debt.	Sinking funds.	Net Debt.
1847-48.....	\$2,129,056 32	.....	\$2,129,056 32
1848-49.....	3,787,328 98	.....	3,787,328 98
1849-50.....	4,463,205 56	.....	4,463,205 56
1850-51.....	4,955,613 51	.....	4,955,613 51
1851-52.....	5,209,223 26	.....	5,209,223 26
1852-53.....	5,972,976 11	.....	5,972,976 11
1853-54.....	5,432,261 11	.....	5,432,261 11
1854-55.....	5,403,961 11	.....	5,403,961 11
1855-56.....	5,230,961 11	.....	5,230,961 11
1856-57.....	5,031,961 11	.....	5,031,961 11
1857-58.....	4,724,961 11	.....	4,724,961 11
1858-59.....	4,754,461 11	.....	4,754,461 11
1859-60.....	3,846,211 11	.....	3,846,211 11
1860-61.....	3,455,211 11	.....	3,455,211 11
1861-62.....	3,012,711 11	.....	3,012,711 11
1862-63.....	2,992,711 11	.....	2,992,711 11
1863-64.....	2,992,711 11	.....	2,992,711 11
1864-65.....	2,942,711 11	.....	2,942,711 11
1865-66.....	3,152,711 11	.....	3,152,711 11
1866-67.....	3,370,711 11	.....	3,370,711 11
1867-68.....	3,867,711 11	.....	3,867,711 11
1868-69.....	5,107,711 11	.....	5,107,711 11
1869-70.....	5,731,711 11	.....	5,731,711 11
1870-71.....	6,482,711 11	\$1,100,000 00	5,382,711 11
1871-72.....	6,812,711 11	1,185,049 67	5,627,661 44
1872-73.....	6,912,711 11	1,268,234 97	5,644,476 14
1873-74.....	7,863,711 11	1,372,952 62	6,490,757 .49
1874-75.....	8,123,711 11	1,533,890 28	6,589,820 .83
1875-76.....	9,735,711 11	1,560,917 83	8,174,793 .28
1876-77.....	11,548,711 11	1,709,492 60	9,839,218 .51
1877-78.....	11,545,273 98	2,043,764 73	9,501,509 .25
1878-79.....	11,753,273 98	2,143,847 85	9,609,426 13
1879-80.....	11,697,273 98	1,771,692 92	9,925,581 06
1880-81.....	11,631,273 98	1,989,300 88	9,641,973 10
1881-82.....	11,631,273 98	2,281,857 89	9,349,416 .09
1882-83.....	11,955,273 98	2,607,768 46	9,347,505 .52
1883-84.....	12,882,273 98	2,746,505 58	10,135,768 .40
1884-85.....	13,045,473 98	3,106,323 82	9,939,150 .16
1885-86.....	13,491,473 98	3,385,201 26	10,106,272 .72
1886-87.....	14,142,273 98	3,947,616 92	10,194,657 .06
1887-88.....	14,741,273 98	4,373,304 09	10,367,969 .89
1888-89.....	14,941,273 98	4,864,092 54	10,077,181 .44
1889-90.....	15,696,273 98	5,440,819 47	10,255,454 .51
1890-91.....	16,267,773 98	5,979,297 80	10,288,476 .18
1891-92.....	16,423,773 98	6,471,545 34	9,952,288 .64
1892-93.....	16,758,773 98	7,019,058 38	9,739,715 .60
1893-94.....	17,055,273 98	7,649,504 87	9,405,769 .11
1894-95.....	17,761,273 98	8,444,773 55	9,316,500 .43
1895-96.....	18,261,273 98	9,099,966 39	9,161,307 .59
1896-97.....	18,261,273 98	9,704,387 99	8,556,885 .99
1897-98.....	17,911,273 98	9,852,760 01	8,058,513 .97
1898-99.....	17,121,273 98	9,487,119 88	7,634,154 .10
1899-1900.....	17,306,273 98	9,870,223 90	7,436,050 .08
1900-1901.....	11,960,273 98	10,144,647 08	1,815,626 .90
1901-1902.....	11,351,917 28	10,422,449 77	929,467 .51
1902-1903.....	9,501,000 00	8,893,615 94	607,384 .06
1903-1904.....	8,227,000 00	7,337,902 79	889,097 .21
1904-1905.....	8,224,000 00	7,600,689 44	623,310 .56
1905-1906.....	6,671,250 00	5,943,222 39	728,027 .61
1906-1907.....	4,562,500 00	3,697,913 53	864,586 .47
1907-1908.....	4,531,500 00	3,794,779 37	736,720 .63

¹ No account taken of amounts borrowed temporarily from 1846 to 1852 and afterwards funded by the issue of water bonds that figure in this statement.

CONTRACTS MADE AND PENDING DURING YEAR COMMENCING FEBRUARY 1, 1907, AND ENDING
JANUARY 31, 1908.

MISCELLANEOUS CONTRACTS.

Contracts marked thus () are completed.*

WATER DEPARTMENT.

DATE.	CONTRACTORS.	MANNER OF AWARDING CONTRACT.	WORK.	PRICE OR AMOUNT.	PAID ON CONTRACT.		
					Previous Year	Year 1907-1908.	Total.
1906.	Hugh Nawn Contracting Co.	Only bid received. Advertised....	{ Teaming water pipes and materials for year ending January 31, 1907.	{ 85 cents per ton, 2,000 pounds for short haul. \$1.45 per ton, 2,000 pounds for long haul.....	\$3,294 69	\$171 69	\$3,466 38
* Mar. 19.	Foxboro Foundry Co.	Lowest bid in competition. Advertised....	{ Miscellaneous iron castings for year ending January 31, 1907.	{ No. 1 @ 2 ⁸ / ₁₀ cents per pound No. 2 @ 2 ¹³ / ₁₀	20,313 96	3,331 53	23,645 49
* Apr. 9.	J. H. McCafferty & Co.	Lowest bid in competition. Advertised....	{ Composition castings for year ending January 31, 1907.	{ No. 1 @ 25 cents per pound No. 2 @ 25 ¹ / ₂ No. 3 @ 20	9,907 18	1,247 74	11,154 92
* Apr. 14.	United States Cast Iron Pipe and Foundry Co.	Only bid received. Advertised....	5 tons 3-inch pipe, B. 5 " 4-inch " B. 300 " 6-inch " B. 300 " 8-inch " B. 200 " 10-inch " B. 950 " 12-inch " B. 375 " 16-inch " B. 150 " 24-inch " B. 100 " 30-inch " B. 150 " 36-inch " B. 1,620 " 48-inch " A. 75 " special castings.	\$.30.70 per ton, 2,000 pounds. \$.30.70 " \$.30.70 " \$.30.70 " \$.30.70 " \$.29.70 " \$.29.70 " \$.28.70 " \$.28.70 " \$.28.70 " \$.28.70 " \$.57.50 "	88,847 07	41,986 75	130,833 82
* Sept. 1.	Cahill Construction Co.	Lowest bid in competition. Advertised....	{ Water pipe trestle and fender guard, Fort Point channel at Congress street.	\$.6,983.00.	7,600 97	7,600 97	7,600 97

CONTRACTS MADE AND PENDING DURING YEAR COMMENCING FEBRUARY 1, 1907, AND ENDING JANUARY 31, 1908.

Miscellaneous Contracts.—Concluded.

Contracts marked thus () are completed.*

DATE.	CONTRACTORS.	MANNER OF AWARDING CONTRACT.	WORK.	PRICE OR AMOUNT.	PAID ON CONTRACT.		
					Previous Year.	Year 1907- 1908.	Total.
1907.							
* Sept. 14, Murray & Tregurtha Co.	Without competition.	{ Installing an 8-H. P. double cylinder engine in launch.....	\$558.00 and the old engine.....		558 00	558 00	
* Sept. 17, Aabaco Surfacing Co.	Without competition.	{ Applying preservative cement coating to Mt. Bellevue stand-pipe.....	\$850 00.....		850 00	850 00	
* Nov. 10, Bryne Contracting Co.	{ Authority of Mayor, without advertising....	{ [\$1.80 per linear foot for trench work and laying pipe. \$5 per cubic yard for rock excavation. 17 cents per linear foot for resetting edgestones, including all incidentals. 50 cents per square yard for repaving and resetting crosswalks, including all incidentals.	3,724 16	5,717 14	9,441 30		
* Nov. 21, Warren Foundry and Machine Co.	{ Authority of Mayor, without advertising....	{ [242 tons 12-inch flexible-joint pipe, 45 tons 4-inch flexible-joint pipe.	\$3840 per ton, 2,000 pounds. 41.50	....	....	11,039 06	11,039 06
Nov. 22, Robert Eagar.	{ Authority of Mayor, without advertising....	{ Laying line of 48-inch water pipe in Prentiss and Parker streets and in Longwood avenue from Columbus avenue to St. Alphonsus street.....	[\$1.80 per linear foot for trench work and laying pipe. \$5 per cubic yard for rock excavation. 17 cents per linear foot for resetting edgestones, including all incidentals. 50 cents per square yard for repaving and resetting crosswalks, including all incidentals.	10,193 36	10,193 36

WATER DEPARTMENT.

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* Feb. 9, Foxboro Foundry Co.	{ Authority of Mayor, without advertising.... Misc. iron castings for 6 mos. from Feb. 1, to July 31, 1907..... }	{ Basis of last year's contract price plus increase in price of raw materials. Prices to be adjusted quarterly..... Prices last year: No. 1, 25 cents per pound. No. 2, 25½ " " " No. 3, 20 " " "	\$19,306 33
Feb. 28, J. H. McCafferty & Co.	{ Authority of Mayor, without advertising.... Composition castings for year ending January 31, 1908..... }	{ Basis of last year's contract price plus increase in price of raw materials. Prices to be adjusted quarterly..... Prices last year: No. 1, 25 cents per pound. No. 2, 25½ " " " No. 3, 20 " " "	10,924 78
* Mar. 20, United States Cast Iron Pipe & Foundry Co.....	{ Authority of Mayor, without advertising.... Castings for 1908..... }	{ 5 tons 4-inch pipe, B..... 75 " 6-inch B..... 300 " 8-inch B..... 200 " 10-inch B..... 550 " 12-inch B..... 50 " 16-inch B..... 25 " special castings..... }	42,389 90
* Mar. 22, Bryne Contracting Co.	Without competition.....	{ Lower 74 feet of 15 inch and 20 inch surface drain and rebuild manhole in Huntington avenue at Longwood avenue..... }	42,389 90
* June 20, Independent Ice Co..	{ One of three bids at same price in competition. Advertised..... }	{ Furnishing ice for public drinking fountains in City Proper, East Boston and Charlestown for season of 1907..... }	42,389 90
* June 20, Hygeia Co.....	{ One of three bids at same price in competition. Advertised..... }	{ Furnishing ice for public drinking fountains in South Boston, Roxbury and West Roxbury for season of 1907..... }	42,389 90
* Aug. 1, Foxboro Foundry Co.	{ Authority of Mayor, without advertising..... }	{ Miscellaneous iron castings for three months from Aug. 1, to Oct. 31, 1907..... }	10,835 19
Nov. 1, Foxboro Foundry Co.	{ Authority of Mayor, without advertising..... }	{ Miscellaneous iron castings for three months from Nov. 1, 1907 to Jan. 31, 1908..... }	2,307 88

¹ \$2,552.20 paid from special appropriation. ² \$1,247.40 paid from special appropriation.

† Payment included in final estimate on their contract of Nov. 10, 1906, for laying 48-inch main in Longwood avenue.

CONTRACTS FOR TRENCH WORK, ETC., AWARDED WITHOUT COMPETITION.

DATE.	CONTRACTOR.	LOCATION.	Length in Feet, Trench, Paid for.	Cu. Yds. Blasting, Paid for.	PRICE.		PAID ON CONTRACT.	
					Per Foot Trench.	Per Cu. Yd. Blasting.	Extra Work.	Total.
Oct. 18, 1906.	Trimount Construction Co.	Bremen street, between Putnam and Bennington streets, East Boston.	1,332	\$0 75	\$4 00	\$6 90	\$1,005 90	
Nov. 6, 1907.	Suffolk Contracting Co.	Evans street, Dorchester	1,334	75	4 00	42 55	1,049 05	
Mar. 28, 1907.	Thomas J. Young & Co.	Nonantum road, Brighton	173	50	5 00 . . . . .	.....	86 50	
Apr. 17, 1907.	Daniel E. Lynch	Rosemont street, Dorchester	482 2	50	5 00 . . . . .	.....	251 00	
Apr. 22, 1907.	Suffolk Contracting Co.	Simmons street, Roxbury	780	75 . . . . .	.....	22 43	607 43	
Apr. 26, 1907.	Christopher P. Conlin	Bremen street, East Boston	722	50 . . . . .	.....	18 40	379 40	
May 1, 1907.	William L. Dolan	Clement avenue and Kenneth street, West Roxbury	659 5	50	5 00 . . . . .	.....	329 75	
May 3, 1907.	Joseph J. Comfrey	Mendum and Berry streets and Chester place, West Roxbury	882 9	50	5 00	50 89	536 89	
May 8, 1907.	Suffolk Contracting Co.	Milton street, Dorchester	494 5 5.2	50	5 00	4 60	277 85	
May 9, 1907.	Frank H. Cowin Co.	Rosewood street, Dorchester	266	50	5 00 . . . . .	.....	133 00	
May 17, 1907.	John A. Costello & Co.	Empire street, Brighton	683	50	5 00 . . . . .	.....	341 50	
May 17, 1907.	C. P. Conlin	Saratoga street, East Boston	856	75	5 00	40 97	682 97	
May 20, 1907.	Byrne Contracting Co.	Magnolia street, Dorchester	1,804 40	80	5 00	16 10	1,659 30	
May 23, 1907.	Frank H. Cowin Co.	Rosewood street, Dorchester	425 95	50	5 00 . . . . .	.....	687 50	
May 28, 1907.	O'Toole & Brayley	Gardner and Morrison streets, West Roxbury	1,300	50	5 00	23 00	673 00	

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May	31,	Suffolk Contracting Co	Highland and Millmont sts., Roxbury.	1,835	53.4	75	5 00	216 49	1,859 74
June	6,	William L. Dolan	Primrose street, West Roxbury	445	0.7	1 00	5 00	2 30	450 80
June	8,	Frank H. Cowin Co.	Colorado street, Dorchester	363	31.4	50	5 00	.....	338 50
June	8,	Frank A. Cowin Co.	Wellington Hill street, Dorchester	96	.....	50	5 00	.....	48 00
June	18,	Joseph J. Comfrey	Landsdowne street, Roxbury	647	.....	50	5 00	51 75	375 25
June	19,	William T. Dolan	Primrose street, West Roxbury (lowering service pipe)	231	.....	\$0 75	\$5 00	.....	\$173 25
June	21,	Henry T. Bowers	Kenilworth street, Roxbury	621	.....	75	5 00	\$16 10	481 85
June	22,	John T. Shea, Jr.	K street, South Boston	1,553	.....	75	5 00	58 42	1,223 17
July	3,	John Guarino & Co.	Dudley and Alexander streets, Dorchester	722	1.0	50	5 00	64 40	430 40
July	3,	John Guarino & Co.	Magnolia street, Dorchester	120	.....	75	.....	66 13	156 13
July	9,	Coyle & Clark	Jackson avenue and Academy Hill road, Brighton	871	.....	75	5 00	8 63	661 88
July	10,	William L. Dolan	Canterbury street	161	1.0	50	5 00	.....	85 50
July	13,	William J. Rafferty	Oakridge street, Dorchester	200	.....	50	5 00	39 10	139 10
July	15,	John A. Costello & Co.	Binney street, Roxbury	242	.....	50	5 00	.....	121 00
July	15,	Orient Construction Co.	Orleans street, East Boston	1,219	.....	50	5 00	113 85	723 35
July	16,	Daniel E. Lynch	Bowdoin avenue, Dorchester	235	10.6	50	5 00	.....	170 50
July	25,	Suffolk Contracting Co	Summer street extension	492	.....	50	5 00	101 71	347 71
July	26,	Henry T. Bowers	Howes street, Dorchester	452	0.25	50	5 00	1 15	228 40
July	26,	John T. Shea, Jr.	K street, South Boston	340	.....	75	5 00	6 90	261 90
July	29,	Daniel E. Lynch	Patten street, West Roxbury	301	.....	50	5 00	.....	150 50
Aug.	2,	James T. Murphy	Old Road, Dorchester	207	49.3	50	5 00	.....	350 00
Aug.	2,	Daniel Marr & Son	Dahlgren street, Dorchester	140	.....	50	5 00	.....	70 00

CONTRACTS FOR TRENCH WORK, ETC., AWARDED WITHOUT COMPETITION.—Concluded.

DATE.	CONTRACTOR.	LOCATION.	Length in Feet, Trench, Paid for.	Cu. Yds. Blasting, Paid for.	PRICE.		PAID ON CONTRACT.
					Per Foot, Trench.	Per Cu. Yd., Blasting.	
1907.							
Aug. 5,	John Guarino & Co.	Dudley, Humphrey and Clifton streets, Dorchester	1,115	1.4	\$0 50	\$5 00	\$261 05
Aug. 15,	Orient Construction Co.	Orleans street, from Sumner to Webster street, East Boston	632	.....	50	5 00	42 55
Aug. 26,	Timothy Coughlin.	Rockledge street, Roxbury	252	22.0	40	5 00	210 80
Aug. 28,	Orient Construction Co.	Cooper and Coleridge streets, East Boston.	363	.....	50	5 00	.....
Sept. 5,	William L. Dolan.	South Fairview street, West Roxbury	442	9.1	50	5 00	22 43
Sept. 6,	James J. Brock.	George street, Charlestown	370	4.2	75	5 00	176 75.
Sept. 10,	Orient Construction Co.	Murray court, East Boston	356	.....	50	5 00	3 45
Sept. 14,	Orient Construction Co.	Bremen and Summer streets, East Boston.	839	.....	50	5 00	76 48
Sept. 23,	Orient Construction Co.	Bayswater street, East Boston	149	.....	50	5 00	8 05
Oct. 1,	Patrick H. Bradley & Co.	Necro street and Necro court.	260	19.6	40	{ *25 }	.....
Oct. 1,	Frank H. Cowin Co.	Whitney Park, Dorchester	291	39 2	50	5 00	6 90
Oct. 1,	Frank H. Cowin Co.	Wellington road, Dorchester	151	25.0	50	5 00	20 70
Oct. 1,	Suffolk Contracting Co.	Hallam street, Dorchester	400	.....	50	5 00	29 33
Oct. 1,	Suffolk Contracting Co.	Parkman street, Dorchester	237	0.6	50	5 00	8 05
Oct. 16,	John J. Kelly.	Mulvey street, Dorchester	208	.....	50	5 00	16 68

Oct.	30,	William L. Dolan.....	Bradford avenue, West Roxbury	644	23.0		50	5 00	20 41	457 41
Nov.	6,	Suffolk Contracting Co	Floyd street, Dorchester.....	443.5	6.6		50	5 00	9 20	263 95
Nov.	8,	Orient Construction Co.	Montmorenci avenue, East Boston.....	483	.....		50	5 00	3 45	244 95
Nov.	15,	William L. Dolan.....	Houston and Linden streets, West Roxbury	328	9.1		50	5 00	20 41	457 41
Nov.	18,	John McCourt.....	Capitol street, West Roxbury.....	324	.....		50	5 00	5 75	167 75
Nov.	25,	Orient Construction Co.	Cottage street, East Boston.....	171	.....		50	5 00	.....	85 50
Nov.	25,	Orient Construction Co.	Frankfort street, East Boston.....	134	.....		50	5 00	.....	67 00
Dec.	5,	Orient Construction Co.	Faxon st., East Boston (estimated),	350	.....		50	5 00	.....	{ Not completed.
Dec.	28,	Daniel E. Lynch.....	Rockdale street, Dorchester (estimated)	320	.....		50	5 00	.....	{ Not completed.

* Per square yard for repaving. Contract not completed.

CONTRACTS FOR BLASTING ROCK IN PIPE TRENCHES — MADE WITHOUT ADVERTISING FOR BIDS.

DATE.	CONTRACTOR.	Manner of Awarding Contract.	LOCATION.	Quantity paid for.	Price or Amount.	Paid on Contract.
1907.						
April 12,	John J. Kelly.....	Lowest bid, competition.....	Harold, Hutchings and Seaver streets, Roxbury.....	39.5 cubic yards.....	\$4 27	\$168 67
April 17,	John Merino	Lowest bid, competition.....	Wellington road, Dorchester.....	17.8 cubic yards.....	6 90	122 82
May 9,	John Guarino & Co..	Without competition,	Claxton and Bynner streets, West Roxbury.....	2 service pipe trenches	30 00	60 00
May 14,	John Guarino & Co..	Without competition,	208 and 214 South Huntington avenue..	11.7 cubic yards.....	5 00	58 50
May 17,	John J. Kelly	Lowest bid in competition	Parish street, Dorchester	27 cubic yards.....	7 00	189 00
May 17,	John Guarino & Co...	Without competition,	137 Hamilton street, Dorchester.....	Service pipe trench...	15 00	15 00
May 29,	John Guarino & Co....	Without competition,	206 Chestnut avenue, West Roxbury.....	Service pipe trench ..	25 00	25 00
June 5,	Robert L. Barrett....	Lowest bid, competition.....	Lawrence road, Dorchester	48.6 cubic yards.....	3 00	145 80
June 27,	John J. Kelly	Without competition,	107-109 Calumet street	Service pipe trench ...	45 00	45 00
July 12,	John J. Kelly	Without competition,	63 Walk Hill street	Service pipe trench ..	40 00	40 00
July 24,	John J. Kelly	Without competition,	61 Clarkwood street, Dorchester	Service pipe trench...	43 00	43 00
Aug. 7,	John J. Kelly	Without competition,	61 Clarkwood street, Dorchester (Remainder).....	Service pipe trench	20 00	20 00
Aug. 27,	John Guarino & Co...	Without competition,	32 Fountain street, Roxbury.....	Service pipe trench...	50 00	50 00
Aug. 30,	John J. Kelly	Without competition,	22 Burr street, West Roxbury	Service pipe trench...	50 00	50 00
Aug. 30,	John J. Kelly	Without competition,	9 Robinwood street, West Roxbury.....	Service pipe trench...	20 00	20 00

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Sept.	4,	John Guarino & Co... Without competition,	715 Walk Hill street.....	Service pipe trench....	20 00
Sept.	16,	John J. Kelly.....| Without competition,	51 Oakridge street, Dorchester	Service pipe trench....	25 00
Sept.	18,	John J. Kelly.....| Without competition,	Washington street, at Rockland street.....	Hydrant trench.....	45 00
Sept.	19,	John J. Kelly.....| Without competition,	54 Catherine street, West Roxbury.....	Service pipe trench..	50 00
Oct.	2,	John J. Kelly.....| Without competition,	22 and 34 Bellevue street and 1 Quincy street, Dorchester	3 service pipe trenches	85 00
Nov.	4,	John J. Kelly.....| Only bid received. Bids invited.....	Fessenden street, Dorchester.....	14.5 cubic yards.....	4 99
Nov.	26,	John Guarino & Co...| Lowest bid compe- tition.....	Field street, Dorchester .....	.....	5 49
Dec.	28,	John Guarino & Co..| Lowest bid, compe- tition.....	Stratheona road, Dorchester .....	.....	3 97
1908.					
Jan.	28,	Robert J. O'Brien ..| Lowest bid, compe- tition.....	Allston street, Brighton .....	.....	4 00

REPORT OF INCOME DIVISION.

OFFICE OF GENERAL SUPERINTENDENT,
CITY HALL, BOSTON, February 1, 1908.

WILLIAM J. WELCH, Esq.,
Water Commissioner:

DEAR SIR,— I submit herewith the annual report of the Income Division, Water Department. The report of the Meter Service Division, also the statement of Water Rates, covers the financial year ending January 31, 1908; the remainder of the report is rendered for the calendar year ending December 31, 1907—it being impracticable, owing to the nature of our accounts, to render it for the financial year.

Respectfully submitted,

J. H. CALDWELL,
General Superintendent Income Division.

TABLE I.

Statement of Water Rates, January 31, 1908.

ACCOUNT OF YEAR.	Amount Assessed.	Amount Abated.	Amount Collected.	Balance Outstanding.
1895.....	\$2,266,519 08	\$55,510 53	\$2,211,008 55	.....
1896.....	2,568,246 04	* 95,162 39	2,473,083 65	.....
1897.....	2,630,413 37	53,864 09	2,576,549 28	.....
1898.....	2,342,804 58	† 235,414 43	2,107,390 15	.....
1899.....	2,414,731 72	† 258,449 66	2,156,282 06	.....
1900.....	2,197,026 64	46,873 45	2,150,153 19	.....
1901.....	2,264,845 26	46,713 28	2,218,131 98	.....
1902.....	2,327,996 91	43,706 89	2,284,290 02	.....
1903.....	2,386,428 02	57,707 76	2,328,347 51	\$372 75
1904.....	2,391,751 16	38,290 92	2,352,679 94	780 30
1905.....	2,446,978 39	36,093 08	2,410,871 31	14 00
1906.....	2,524,036 51	35,973 17	2,484,978 78	3,084 56
1907.....	2,618,123 52	17,565 57	2,571,660 14	28,897 81
‡1908.....	1,338,121 74	1,125 45	102,726 24	1,234,270 05

Above amounts for years 1895, 1896 and 1897 include both Cochituate and Mystic supply accounts. The contracts to supply Chelsea, Somerville and Everett with Mystic water were abrogated by the Metropolitan Water Act of January 1, 1898.

* This amount includes certain city department accounts, abated by order of the Mayor.

† These amounts include abatements of city department accounts, under order of the City Council, approved by the Mayor on March 5, 1900, said order also abolishing all charges for water used by city departments.

‡ The statement of water rates for the year 1908 is for annual accounts only; the quarterly meter accounts can only be estimated at this time.

TABLE II.

Number of Classified Water Takers During 1907.

	Number.
By annual rates.....	95,224
By meter rates.....	5,489
City supplies of all kinds.....	9,467
Total.....	110,180

TABLE III.

Kind and Number of Fixtures in use December, 1907.

	Number.
Bath-tubs.....	92,000
Bowls.....	127,799
Foot-tubs.....	590
Sinks.....	193,900
Taps.....	35,454
Urinals, automatic.....	4,795
" otherwise.....	478
Wash-tubs.....	148,204
Water-closets.....	192,285
Total fixtures.....	795,505

TABLE IV.

Water at Annual Rates.

CLASSIFICATION.	Number.	Amount.
Armories.....	6	\$153 50
Bakeries.....	287	3,937 84
Bath houses.....	1	22 00
Building purposes.....	847	8,274 78
Cemeteries.....	8	44 92
Churches.....	267	3,083 92
Clubs.....	195	3,012 92
<i>Brought forward.....</i>	<i>1,611</i>	<i>\$18,529 88</i>

TABLE IV.—*Concluded.*

CLASSIFICATION.	Number.	Amount.
<i>Brought forward.....</i>	1,611	\$18,529 88
Depots and stations.....	64	1,306 25
Dispensaries.....	8	165 67
Dwelling houses.....	53,116	782,756 17
Fountains.....	6	70 50
Freight houses.....	10	105 20
Garages.....	5	72 75
Greenhouses.....	57	846 92
Gymnasiums.....	3	62 92
Halls.....	243	1,955 25
Hand hose.....	9,170	45,850 00
Hospitals and asylums.....	69	5,018 74
Laboratories.....	5	133 00
Laundries.....	381	7,312 25
Libraries and museums.....	22	500 00
Manufactories.....	26	328 50
Model houses.....	14,815	327,635 09
Motors.....	9	51 25
Offices.....	1,581	13,744 27
Photographers.....	47	1,108 67
Police stations.....	3	45 00
Pool and bowling.....	99	1,366 70
Puddling trenches and paving.....	17	622 00
Razing buildings.....	7	39 69
Restaurants and lunch rooms.....	526	8,821 14
Saloons and bottling.....	429	18,358 80
Schools.....	70	1,393 17
Shops.....	3,100	28,795 38
Street watering.....	9	431 76
Shipping.....	5	78 15
Stables.....	3,004	20,774 01
Steam and gas engines.....	167	1,921 08
Steam crushers.....	1	17 00
Stores.....	6,538	70,761 62
Tanks.....	2	417 25
Totals.....	95,225	\$1,361,396 03

TABLE V.

Water at Meter Rates.

CLASSIFICATION.	Number.	Quantity of Water Consumed. Cubic Feet.	Amount Assessed.
Armories.....	3	336,000	\$449 40
Bakeries.....	24	1,071,000	1,439 20
Bath houses.....	10	925,000	1,220 92
Boarding houses.....	103	6,648,000	8,842 15
Bottling establishments.....	36	2,654,000	3,550 70
Breweries.....	25	22,975,000	28,688 50
Cemeteries.....	5	602,000	780 41
Chemicals.....	6	668,000	880 90
Clubhouses.....	54	12,200,000	15,078 57
Distilleries.....	5	2,126,000	2,634 50
Electrical companies.....	9	26,288,000	26,694 30
Elevators and motors.....	510	30,312,000	52,652 33
Factories.....	301	60,834,000	83,134 33
Fish houses.....	29	1,848,000	2,398 70
Garages.....	34	4,226,000	5,536 30
Gas works.....	12	14,098,000	16,166 00
Greenhouses.....	11	899,000	1,182 20
Halls.....	17	3,314,000	4,172 80
Hospitals.....	24	12,976,000	15,569 97
Hotels.....	105	77,703,000	100,286 28
Ironworks.....	35	10,715,000	13,261 40
Laundries.....	72	23,485,000	29,197 75
Markets.....	2	100,000	140 00
Mills and engines.....	62	11,502,000	14,591 60
Model houses.....	1,303	96,030,000	129,757 31
Navy Yard and barracks.....	6	36,750,000	33,676 05
Offices, stores and shops.....	1,732	192,503,000	265,818 74
Oil works.....	1	60,000	84 00
Pool and bowling.....	5	82,000	113 90
Public institutions.....	11	10,006,000	12,907 60
Saloons and restaurants.....	343	22,176,000	29,127 21
Schools.....	54	6,485,000	8,551 43
Slaughtering houses.....	6	3,278,000	4,040 70
Stables.....	342	17,899,000	24,437 84
Steam and street railways.....	46	243,007,000	219,552 26
Stone works.....	8	1,531,000	1,960 70
Sugar refineries.....	1	37,610,000	29,996 80
Tanneries.....	8	470,000	634 20
Theaters.....	24	4,185,000	5,402 40
Warehouses.....	25	7,389,000	9,244 00
Wharves and shipping.....	80	42,670,000	53,115 88
Totals.....	5,489	1,050,636,000	\$1,256,970,23

TABLE VI.

Number and Amounts of Abatements Allowed during the Year 1907.

ON ACCOUNT OF ASSESSMENTS FOR YEAR.	Number.	Amount.
1906.....	1,801	\$18,554 80
1907.....	2,351	16,204 80
Total.....	4,152	\$34,759 60

TABLE VII.

New Elevator, Motor and Service Pipes.

Elevator pipes.....	11
Motor pipes.....	1
Fire pipes.....	42
Service pipes.....	1,132
Total.....	1,186

TABLE VIII.

Turning Water Off and On.

For repairs of mains.....	659
For repairs of service.....	3,717
For non-payment of water bills.....	1,736
For waste.....	4
Turned on first time.....	1,152
Vacancies.....	2,489
Total.....	9,757

TABLE IX.

Off and On Receipts.

Received for turning water off and on for repairs, deposited with City Collector.....	\$1,820 00
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TABLE X.

ELEVATOR, MOTOR AND FIRE PIPE SERVICE, FOR THE YEAR ENDING DECEMBER 31, 1907.

Elevators.

Under supervision December 31, 1906	591
Discontinued during the year	9
Changed to electric	4
	— 13
New elevators inspected and accepted during the year	578
	— 8
	586
Changed to tank and metered water and still under supervision	67
Inspections made	591
Accuracy tests made	498
Registering inaccurately and repaired by owners	63
Wasting water and repaired by owners	26
Clock, cord broken and repaired by owners	77
Clock, hands off, or glass broken and repaired by owners	29

<i>Motors.</i>	
Under supervision December 31, 1906	120
Discontinued	2
Changed to electric	2
	— 4
	116
Motors on meters	17
Inspections made	123
Measured	5
Tested	117
Registering inaccurately and repaired by owners	18
Not registering, repaired by owners	12
Wasting water and repaired by owners	4
<i>Fire Service.</i>	
Premises under supervision December 31, 1906	529
Supervision discontinued	9
	520
Premises equipped during year	21
Premises under supervision December 31, 1907	541
	—
Inspection of premises	3,326
Total number of inspections of outlet valves	42,070
Total number of hydrant inspections	864
Total number of valves sealed and resealed	3,953
Total number of hydrant valves sealed and resealed	148
<i>By-passes.</i>	
Meter by-passes under supervision December 31, 1906	38
Discontinued	2
	36
By-passes, additional	1
Under supervision December 31, 1907	37
Inspections made	235
Resealed	24

TABLE XI.

WASTE DETECTION.

Water Inspection.

Waste reports.....	6,203
First examinations.....	6,203
Second examinations.....	3,794
Third examinations.....	1,843
Fourth examinations.....	196
Fine notices issued.....	98

TABLE XII.

Defective Fixtures and Waste.

Tank fixtures leaking.....	2,689
Faucets leaking.....	2,297
Bursts inside.....	208
Bursts outside.....	7
Hopper-cocks leaking.....	43
Water-closets leaking.....	959

TABLE XIII.

Statement of Meters for the Year Ending January 31, 1908.

Meters belonging to the department January 31, 1907	.	.	.	.	5,285
Purchased	:	:	:	:	371
Reclaimed	:	:	:	:	1
					<hr/>
Condemned during year	.	.	.	.	213
Lost	.	.	.	.	3
					<hr/>
Belonging to department January 31, 1908	.	.	.	.	5,441

TABLE XIV.

Distribution of Meters January 31, 1908.

In service	.	.	.	.	.	.	.	.	.	5,185
At department shop	.	.	.	.	.	.	.	.	.	256
										<hr/>
										5,441

TABLE XV.

General Statement of Work Performed on Meters During Year Ending January 31, 1908.

	Meters.	Boxes.
Applied.....	347	63
Discontinued.....	246	.....
Changed.....	817	.....
Changed location.....	4	.....
Tested.....	2,248	.....
Repaired at shop.....	740	.....
Repaired at factory.....	54	.....
Repaired in service.....	340	188
Examined.....	171	.....
Abandoned.....	5	.....
Hayed.....	1,696	.....
Condemned.....	213	.....
Purchased.....	371	.....
In service.....	5,185	.....
Private meters in service.....	53	.....
At department shop.....	256	.....

TABLE XVI.

Meters Applied.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Crown.....	1	2	9	8	23	18	32	54	147
Worthington.....				3		2	2		7
Hersey.....	2	2	2	20	16	14	19		75
Metropolitan.....							3		3
Disc, H.....				1	10	10	36	48	105
Gem.....	2								2
Nash.....					1	1		1	3
Thomson.....							1	1	2
Lambert.....								1	1
B. W. W.....							2		2
Totals.....	5	4	11	32	50	45	95	105	347

TABLE XVII.

Meters Discontinued.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Crown.....		1	1	6	10	6	12	61	97
Worthington.....	1	1	7	3	14	12			38
Metropolitan.....				1	1	11			13
Hersey.....		3	21	19	5	14	1		63
Disc, H.....				1	3	8	19		31
Trident.....					1				1
Gem.....	1								1
B. W. W.....							1		1
Nash.....				1					1
Totals.....	3	5	34	35	30	58	81		246

TABLE XVIII.

Meters Purchased.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	$\frac{3}{4}$	$\frac{5}{8}$	
Crown.....	2		12	14	14	18	56	.....	116
Gem.....	3	1	.....	.....	.....	.....	.....	.....	4
Hersey.....	3	3	1	4	3	6	.....	.....	20
Disc, H.....	.....	.....	.....	.....	24	51	96	60	231
Totals.....	6	6	13	18	41	75	152	60	371

TABLE XIX.

Meters Repaired at Factory.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	$\frac{3}{4}$	$\frac{5}{8}$	
Crown.....	1	1	2	5	1	6	4	20	40
Hersey.....	.....	.....	.....	1	3	3	5	.....	12
Nash.....	.....	.....	.....	.....	.....	1	.....	1	2
Totals.....	1	1	2	6	4	10	9	21	54

TABLE XX.

Meters Condemned.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	$\frac{3}{4}$	$\frac{5}{8}$	
Crown.....	.....	.....	.....	.....	1	.....	4	18	23
Worthington.....	1	.....	1	9	11	44	38	2	106
Metropolitan.....	.....	.....	.....	1	3	11	59	.....	74
Hersey.....	.....	.....	.....	.....	.....	2	7	.....	9
B. W. W.....	.....	.....	.....	.....	.....	.....	1	.....	1
Totals.....	1	.....	1	10	15	57	109	20	213

TABLE XXI.

Meters Repaired in Service.

CAUSE OF REPAIRS.	Number.	CAUSE OF REPAIRS.	Number.
Glass broken.....	84	Brought forward.....	260
Ratchet broken.....	7	Coupling leak.....	50
Clock broken.....	66	Body leak.....	1
Cover broken.....	21	Defaced.....	15
Intermediate broken.....	1	Gear bound.....	9
Spindle broken.....	1	Gear loose.....	3
Gear broken.....	3	Clock loose.....	2
Spindle leak.....	77		
<i>Carried forward.....</i>	<i>260</i>	Total.....	340

TABLE XXII.

Meters Changed.

CAUSE.	Number.	CAUSE.	Number.
Test.....	285	Brought forward.....	620
Rust.....	22	Intermediate broken.....	52
Not registering.....	94	Intermediate worn.....	8
Gravel.....	12	Gear bound.....	14
Solder.....	9	Leak at body.....	17
No force.....	54	Clock broken.....	46
Stoppage.....	44	Piston bound.....	9
Heat.....	18	Did not mesh.....	19
Gasket.....	4	Piston broken.....	8
Enlargement.....	28	Valve broken.....	4
Relocate.....	16	Ratchet broken.....	15
Frost.....	14	Coupling leak.....	5
Gear loose.....	20	Total.....	817
<i>Carried forward.....</i>	<i>620</i>		

TABLE XXIII.
Meters in Service January 31, 1908.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Crown.....	11	49	68	108	185	402	553	1,195	2,571
Worthington.....	1	12	27	115	105	373	210	1	844
Hersey.....	10	17	39	136	172	274	376	17	1,041
Metropolitan.....	.....	.....	.....	.....	12	42	297	2	353
Disc, H.....	1	.....	7	7	43	54	108	82	302
B. W. W.....	.....	.....	.....	.....	.....	.....	25	.....	25
Lambert.....	.....	.....	.....	2	3	1	5	3	14
Nash.....	.....	.....	3	.....	.....	3	1	1	8
Thomson.....	.....	.....	.....	.....	.....	.....	1	3	4
Gem.....	3	5	.....	1	.....	.....	.....	.....	9
Empire.....	.....	.....	.....	.....	7	4	1	.....	12
Torrent.....	1	.....	.....	.....	.....	.....	.....	.....	1
Trident.....	.....	.....	.....	.....	.....	1	.....	.....	1
Totals.....	27	83	144	369	527	1,154	1,577	1,304	5,185

TABLE XXIV.
Private Meters in Service January 31, 1908.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Worthington.....	.....	.....	2	5	.....	3	.....	2	12
Crown.....	6	2	2	5	10	3	2	4	34
Hersey.....	.....	2	1	1	.....	.....	.....	.....	4
Gem.....	2	.....	.....	.....	.....	.....	.....	.....	2
B. W. W.....	.....	.....	.....	.....	.....	.....	1	.....	1
Totals.....	8	4	5	11	10	6	3	6	53

TABLE XXV.

Meters at Department Shop January 31, 1908.

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Crown.....		2	6	14	6	16	10	34	88
Worthington.....		7	3	11	2	17	22	3	65
Metropolitan.....				2		2	9		13
Hersey.....	1	1	3	4	2	5	6	3	25
Disc, H.....					8	11	4	14	37
B. W. W.....							4		4
Lambert.....								3	3
Thomson.....							1	3	4
Nash.....							1	1	2
Empire.....						1	1		2
Gem.....	2	1	4	1					8
Trident.....						1			1
Rogers.....							1		1
Ball & Fitts.....			1	1			1		3
Totals.....	3	11	17	33	18	53	60	61	256

TABLE XXVI.

Meters Belonging to Department January 31, 1908.

	DIAMETER IN INCHES.								Totals
	6	4	3	2	1½	1	¾	⅝	
Crown.....	11	51	74	122	191	418	563	1229	2,659
Worthington.....	1	19	30	126	107	390	232	4	909
Hersey.....	11	18	42	140	174	279	382	20	1,066
Metropolitan.....				2	12	44	306	2	366
Disc, H.....	1		7	7	51	65	112	96	339
B. W. W.....							29		29
Lambert.....				2	3	1	5	6	17
Nash.....			3			3	2	2	10
Thomson.....							2	6	8
Gem.....	5	6	4	2					17
Empire.....					7	5	2		14
Torrent.....	1								1
Trident.....						2			2
Ball & Fitts.....			1	1			1		3
Rogers.....							1		1
Totals.....	30	94	161	402	545	1,207	1,637	1,365	5,441

REPORT OF DISTRIBUTION DIVISION.

OFFICE OF THE ASSISTANT COMMISSIONER,
710 ALBANY STREET, February 1, 1908.

WILLIAM J. WELCH, ESQ.,
Water Commissioner:

SIR,—I herewith submit in tabular form the annual report of the Distribution Division for the year ending January 31, 1908.

Respectfully,

JAMES P. LENNON,
Assistant Commissioner in Charge.

NEW MAINS LAID.

Statement of Location, Size, Nominal Pressure, and Number of Feet Laid during the Year Ending January 31, 1908.

NOTE.—C. P. indicates City Proper; Rox., Roxbury; W. R., West Roxbury; Bri., Brighton; Dor., Dorchester; S. B., South Boston; E. B., East Boston; Chsn., Charlestown; Win., Winthrop; B. H., Boston Harbor.

LOCATION.	District.	Size.	Nominal Pressure.	Number of feet.
Prentiss street.....	Bet. Columbus ave. and Tremont st...	Rox. 48-in.	L.	85
" "	" " Parker st....	" "	L.	758
Parker street.....	" Prentiss st. and Longwood ave..	" "	L.	166
Longwood avenue..	" Huntington ave. and Parker st....	" "	L.	1,412
" "	" Vila street and Brookline avenue.	" "	L.	790
	Total 48-inch.....			3,211
Brookline avenue..	Junction of Longwood avenue (connection between 40-inch and 48-inch)	Rox. 36-in.	L.	44
Prentiss street.....	Between Columbus avenue and Tremont street.....	" "	L.	53
	Total 36-inch.....			97
Congress street....	Bet. Franklin st. and Atlantic ave....	C. P. 30-in.	L.	915
Prentiss street.....	" Columbus ave. and Tremont st...	Rox. "	L.	35
	Total 30-inch.....			950

New Mains Laid.—*Continued.*

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.
Congress street.....	At Bridge.....	S. B.	24-in.	L.	115
	Total 24-inch.....				115
Beverly street.....	60 feet north of Lovejoy place (connection between 20-inch and 30-inch)	C. P.	20-in.	L.	18
Huntington avenue	At Longwood avenue (connection between 48-inch and 16-inch).....	Rox.	"	L.	8
	Total 20-inch.....				26
Congress street....	At High street (connection between 30-inch and 16-inch).....	C. P.	16-in.	L.	14
Atlantic avenue....	At Congress street (connection between 30-inch and 16-inch).....	"	"	L.	16
Huntington avenue	At Longwood avenue (connection between 16-inch and 48-inch).....	Rox.	"	L.	43
Longwood avenue.	At Brookline avenue (connection between 12-inch and 48-inch).....	"	"	L.	23
Congress street....	At Bridge.....	S. B.	"	H.	134
Dudley street.....	Between Magnolia and Nonquit streets	Dor.	"	H.	570
" "	At Clifton street (connection between 24-inch and 12-inch).....	"	"	L.	12
	Total 16-inch.....				812
State street.....	Bet. Commercial st. and Atlantic ave..	C. P.	12-in.	H.	130
Causeway street...	Between Beverly street and Washington street North.....	"	"	H.	480
Frankfort street...	Between Porter and Maverick streets..	E. B.	"	L.	120
Lansdowne street..	" Brookline ave and Ipswich st.	Rox.	"	L.	202
" " ...	" " "	"	"	L.	581
Rosewood street...	East from Randolph road.....	Dor.	"	H.	639
Dudley street.....	Between Magnolia and Nonquit sts....	"	"	H.	16
" "	At Clifton street (connection between 24-inch and 12-inch).....	"	"	L.	17
Boston Consumptives' Hospital Grounds.....	Between River and West Selden sts...	"	"	H.	735
Wellington Hill st..	West from Duke street.....	"	"	H.	81
Summer-street Ext.	From A street.....	S. B.	"	L.	354
Mt. Vernon street..	Between Garfield and Vermont sts....	W. R.	"	H.	66
Vermont street....	" Mt Vernon and Potomac sts..	"	"	H.	107
Gardner street.....	" Ashumet and Morrison sts...	"	"	H.	467
Morrison street....	From Gardner street.....	"	"	H.	785
	<i>Carried forward.....</i>				4,780

New Mains Laid.—*Continued.*

LOCATION.		District.	Size.	Nominal Pressure.	Number of feet.
	<i>Brought forward.....</i>		.....	.....	4,780
Canterbury street..	Between Angell and Austin streets....	W. R.	12-in.	H.	130
Eastbourne street..	“ Beech and Cornell streets....	“	“	H.	96
Bellevue avenue...	“ Cornell and Cedar streets....	“	“	H.	48
Baker street.....	“ Capital and Temple streets ..	“	“	H.	335
Commonwealth ave	At Allston street.....	Bri.	“	L.	47
	<i>Total 12-inch.....</i>		.....	.....	<u>5,436</u>
Maverick street....	At Frankfort street (connection between 16-inch and 10-inch).....	E. B.	10-in.	L.	28
Cottage street.....	Between Porter and Maverick streets..	“	“	L.	111
Worthington street,	“ Fenway and Longwood ave..	Rox.	“	L.	330
Milton street.....	East from Granite street.....	Dor.	“	H.	476
Claxton, formerly Callender street..	Off Blue Hill avenue.....	“	“	H.	230
Oakridge street....	From Codman street.....	“	“	H.	180
Howes street.....	Between Pleasant street and Dorchester avenue.....	“	“	L.	352
Hallam street.....	Between Dorchester avenue and Auckland street.....	“	“	L.	358
Floyd street.....	Between Blue Hill avenue and Lucerne street.....	“	“	H.	426
Bowen street.....	At F street.....	S. B.	“	L.	33
Necco street.....	Between Melcher st. and Necco ct....	“	“	H.	155
Mendum street....	“ Walter and Fairview streets..	W. R.	“	H.	332
South Fairview st..	“ Dudley avenue and Guernsey street.....	“	“	H.	418
Bradford avenue..	Between South and Centre streets ...	“	“	H.	597
“ “ ..	“ “ “ “ ..	“	“	H.	203
St. Rose street....	“ Parkway and Jamaica street,	“	“	H.	104
Jackson avenue....	Between Chestnut Hill avenue and Academy Hill road.....	Bri.	10-in.	H.	181
Allston street.....	Near Commonwealth avenue.....	“	“	L.	304
	<i>Total 10-inch.....</i>		.....	.....	<u>4,818</u>
Lovejoy place.....	From Beverly street.....	C. P.	8-in.	L.	237
“ “	“ “ “	“	“	H.	471
Cowper street.....	“ Byron street.....	E. B.	“	L.	160
	<i>Carried forward.....</i>		.....	.....	868

New Mains Laid.—*Continued.*

LOCATION.	District.	Size.	Nominal Pressure.	Number of feet.	
<i>Brought forward.....</i>				868	
Coleridge street....	From Wordsworth street.....	E. B.	8-in.	L.	105
Bayswater street...	Between Austin street and water front,	"	"	L.	104
Montmorenci ave..	" Orient ave. and Tower st.....	"	"	H.	426
Faxon street.....	" Butler and Austin avenues...	"	"	L.	357
Farnham street....	" Gerard and Magazine streets,	Rox.	"	L.	96
Waumbeck street..	" Harold and Crawford streets,	"	"	H.	320
Harold street.....	" Hutchings and Seaver sts....	"	"	H.	120
Hutchings street...	At Harold street	"	"	H.	160
Binney street.....	Bet. Longwood ave. and Smyrna st...	"	"	L.	222
Sherwood street...	From Shirley street.....	"	"	L.	118
Saranac street.....	Between Adams and Minot streets....	Dor.	"	H.	301
Doris street.....	Bet. Dorchester ave. and Gardner st...	"	"	L.	308
Bullard street.....	" Nottingham and Bowdoin sts....	"	"	H.	322
Wellington r o a d , north side.....	Off Magnolia street.....	"	"	H.	95
Rosemont street...	Between Train and Gustine streets....	"	"	H.	435
Parish street.....	Off Winter street.....	"	"	H.	248
Wellington r o a d , west side.....	Between north and south sides.....	"	"	H.	133
Colorado street....	From Almont street.....	"	"	H.	354
Lawrence road....	Between Norfolk st. and Blue Hill ave.	"	"	H.	557
Bowdoin avenue...	" Hawes ave. and Columbia rd,	"	"	H.	203
Hansboro' street...	" Blue Hill ave. and Harvard st.	"	"	H.	114
Parkman street....	From Neponset avenue.....	"	"	L.	184
Whitney park.....	" River street	"	"	H.	244
Mulvey street.....	" Walk Hill street	"	"	H.	197
Howe street.....	Between Bloomington and Eaton sts..	"	"	L.	73
Fessenden street...	From Blue Hill avenue.....	"	"	H.	89
Fifield street.....	Between Winter and Church streets...	"	"	H.	148
Strathcona road...	Off Washington street.....	"	"	H.	162
Rockdale street....	" Randolph road.....	"	"	H.	275
Cypher street.....	" D street.....	S. B.	"	L.	45
Necco court.....	From Necco street.....	"	"	H.	161
Clement avenue....	Between Park and Stratford streets...	W.R.	"	H.	373
	<i>Carried forward.....</i>			7,917	

New Mains Laid.—Concluded.

	LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.
	<i>Brought forward</i>				7,917
Kenneth street	Between Meredith and Stratford sts . . .	W. R.	8-in.	H.	241
Chester place	Off Maple street	"	"	H.	240
Berry street	" Cornwell street	"	"	H.	182
Chestnut square	" Chestnut avenue	"	"	H.	150
Patten street	Between Bourne st. and Edgerly rd . . .	"	"	H.	247
Bradford terrace	" Edgemont and South streets,	"	"	H.	66
Edgemont street	" Bradford ter. and South st	"	"	H.	204
Capital street	From Baker street	"	"	H.	336
Bridge street	" Canterbury street	"	"	H.	101
Nonantum road	Off Crescent avenue	Bri.	"	H.	140
Empire street	Between Mayflower and Hooker sts . . .	"	"	L.	535
Hamblen street	At George street (connection between 6-inch and 8-inch)	Chsn.	"	L.	8
	Total 8-inch				<u>10,367</u>
Renfrew street	Bet. Harrison ave. and Winslow st . . .	Rox.	6-in.	L.	180
Rockledge street	" Thornton st. and Lambert ave . . .	"	"	H.	230
Segal street	" Georgia and Cheney streets	"	"	H.	334
Whitfield street	" Talbot ave. and Aspinwall rd . . .	Dor.	"	H.	94
Dahlgren street	" Corona and Westville streets	"	"	H.	125
Old Road	From Glenway street	"	"	H.	182
Schiller street	Off Rockland street	W.R.	"	H.	35
Cedar street	Bet. Washington st. and Bellevue ave.,	"	"	H.	156
	Total 6-inch				<u>1,336</u>
Bowen street	At F street	S. B.	4-in.	L.	16
	Total 4-inch				<u>16</u>

OLD AND INADEQUATE MAINS REplaced BY NEW AND LARGER ONES.

Statement of Location, Size, Nominal Pressure, Number of Feet Laid and Size of Mains Abandoned During the Year Ending January 31, 1908.

	LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.	Size Abandoned
Tremont street.....	At Prentiss street.....	Rox.	36-in.	L.	15	36-in.
	Total 36-inch.....		.....	.....	<u>15</u>	.....
"	At Prentiss street.....	"	30-in.	L.	34	30-in.
	Total 30-inch.....		.....	.....	<u>34</u>	.....
Washington street..	Between State st. and Court ave.	C. P.	24-in.	L.	174	24-in.
	Total 24-inch.....		.....	.....	<u>174</u>	.....
Beverly street.....	Bet. Causeway st. and Warren bridge.....	"	20-in.	L.	287	20-in.
	Total 20-inch.....		.....	.....	<u>287</u>	.....
High street.....	At Congress street.	C. P.	16-in.	L.	94	8-in.
Prescott street.....	Bet. Chelsea and Bremen sts...	E. B.	"	L.	205	6-in.
	Total 16-inch.....		.....	.....	<u>299</u>	.....
North Market st. . .	Between Commercial street and Merchants row.....	C. P.	12-in.	L.	575	{ 6 & 8-in.
Congress street.....	Between Atlantic avenue and Franklin street.....	"	"	L.	882	8-in.
Eustis street.....	Bet. Mall and Albany streets...	Rox.	"	L.	140	6-in.
Highland street....	" Eliot sq. and Millmont st..	"	"	H.	715	"
Millmont street....	" Highland st. and Lambert avenue.....	"	"	H.	679	"
Lambert avenue ...	At Millmont street.....	"	"	H.	16	"
Magnolia street	Bet. Quincy and Half Moon sts.	Dor.	"	H.	1,531	"
Adams street	At Cedar Grove bridge.....	"	"	H.	96	12-in.
Magnolia street	" Quincy street.....	"	"	H.	16	"
Fifth street.....	Over railroad bridge.....	S. B.	"	H.	46	"
	Total 12-inch.....		.....	.....	<u>4,696</u>	.....
Church street.....	Between Providence and Boylston streets.....	C. P.	10-in.	L.	169	6-in.
Providence street ..	Bet. Park sq. and Berkeley st..	"	"	L.	230	"
	<i>Carried forward.....</i>		.....	.....	399	.....

Old and Inadequate Mains Replaced by New and Larger Ones.—Concluded.

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.	Size Abandoned.
	<i>Brought forward.....</i>				399	.....
Purchase street....	At Congress street.....	C. P.	10-in.	L.	43	8-in.
Ash street.....	Between Oak and Nassau sts...	"	"	L.	164	6-in.
Palmer street.....	Across Winslow street.....	Rox.	"	L.	70	"
Simmons street	Bet. Vernon st. and Linden pk.	"	"	L.	668	{6 & 8-in.
K street.....	Bet. First and Fourth streets..	S. B.	"	L.	1,575	6-in.
Second street.....	At K street.....	"	"	L.	57	"
Third street.....	" "	"	"	L.	51	"
Emerson street.....	" "	"	"	L.	15	"
Fifth street.....	Over railroad bridge.....	"	"	L.	47	"
Jackson avenue....	Between Chestnut Hill avenue and Academy Hill road.....	Bri.	"	H.	376	"
Academy Hill road.	Between Jackson avenue and Mt. Vernon avenue.....	"	"	H.	240	"
George street.	Bet. Hamblen st. and railroad..	Chsn.	"	L.	350	{6-in. 3-in.
	<i>Total 10-inch.....</i>				4,055	.....
Winslow street....	Bet. Eustis and Palmer streets.	Rox.	8-in.	L.	316	6-in.
Highland place.....	Off Highland street.....	"	"	H.	168	4-in.
Chestnut square....	" Chestnut avenue.....	W.R.	"	H.	108	6-in.
	<i>Total 8-inch.....</i>				592	.....
Prescott street....	Bet. Chelsea and Bremen sts...	E. B.	6-in.	L.	9	6-in.
Murray court.....	From Orleans street.....	"	"	L.	187	4-in.
Kenilworth street ..	" Dudley st. to Dudley st. .	Rox.	"	H.	554	"
Hamblen street....	At George street.....	Chsn.	"	L.	8	6-in.
	<i>Total 6-inch.....</i>				758	.....

MAINS RELOCATED.

Statement of Location, Size, Nominal Pressure, Number of Feet Laid During the Year Ending January 31, 1908.
Size of Main before Relocation and Explanatory Remarks.

LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.	Size before Relocation.	REMARKS.
Washington street.....	At Court avenue.....	C. P.	24-in.	L.	50	24-in.
Dudley street.....	Between Magnolia and Nonquit streets.....	Dor.	"	L.	485	" Acc't of tunnel.
	Total, 24-inch.....				<u>535</u>	" grade crossing abolishment.
Atlantic avenue.....	At Congress street.....	C. P.	16-in.	L.	34	Lowered on account of 30-inch line.
Devonshire street.....	Between Dock square and State street.....	"	"	L.	325	On account of tunnel.
Boylston street.....	At Washington street.....	"	"	H.	50	Raised on account of tunnel.
Winter street.....	" "	"	"	H.	49	" Acc't of tunnel.
Maverick street.....	Between Chelsea and Frankfort streets.....	E. B.	"	L.	136 { 10 and 12-in. }	" grade crossing abolishment.
Prescott street.....	" Bremen " "	"	"	L.	260	12-in.
Saratoga st. (north side)...	" Chelsea and Swift streets.....	"	"	L.	457	" "
	Total, 16-inch.....				<u>1,311</u>	

Mains Relocated.—Continued.

LOCATION.

	District.	Size.	Normal Pressure.	Number of Feet.	Size before Relocation.	Remarks.
Washington street.....	At Castle street.....	C. P.	12-in.	L.	23	12-in. Moved on account of Boston Elevated Railway Company.
" "	At Castle street on N. Y., N. H. & H. R.R. bridge.....	"	"	L.	87	" Moved on account of Boston Elevated Railway Company.
Oak street.....	Bet. Washington street and Harrison ave....	"	"	L.	204	" Lowered on account of Boston Elevated Railway Company.
Matthews street.....	At Congress street.....	"	"	L.	13	" Lowered on account of 30-inch line.
Franklin street.....	" "	"	"	L.	16	" " " "
"	" "	"	"	H.	13	" " " "
"	" Washington street.....	"	"	L.	82	" Raised on account of tunnel.
"	" "	"	"	H.	99	" " " "
"	" "	"	"	L.	60	" " " "
"	" "	"	"	L.	30	" " " "
Washington street.....	Between Hanover and Union streets.....	"	"	L.	150	" " On account of tunnel.
Dock square.....	At Devonshire street.....	"	"	L.	15	" " " "
Washington street.....	" Court avenue.....	"	"	L.	50	" " " "
State street (south side).....	Bet. Washington and Devonshire streets.....	"	"	H.	181	" " " "
" "	" " "	"	"	L.	163	" " " "
Washington street.....	At State street (south side).....	"	"	H.	22	" " " "
" "	" " (north side).....	"	"	H.	21	" " " "
Haymarket square.....	Across subway.....	"	"	L.	9	" " " "
Summer street.....	At Washington street.....	"	"	H.	16	" " " "

Mains Relocated.—*Continued.*

LOCATION.	District.	Size.	No. of Prinlal Fees.	No. of Fees before Relocation.	Size before Relocation.	REMARKS.
Shirley street.....	Brought forward.....	Win. 12-in.	L.	4.167 <u>4.638</u>	8-in.	Moved off private property.
Between Beach road and Cross street.....	E. B.	10-in.	L.	491 { 6 and 10-in. 6-in.	{ 6 and 10-in. 6-in.	Acc't of grade crossing abolishment.
Total 12-inch.....	"	"	L.	38	"	"
Between Bennington and Saratoga streets.....	"	"	L.	39	"	"
At Orleans street.....	"	"	L.	63	"	On account of 48-inch line.
" "	"	"	L.	4	10-in.	Raised on account of sewer.
Between Columbus ave. and Mindora st.....	Rox.	"	L.	20	"	Raised over 30 and 36-inch line.
At Warwick street.....	"	"	L.	204	8-in.	Acc't of grade crossing abolishment.
At Tremont street.....	"	"	L.	229	6-in.	"
From Dudley street.....	Dor.	"	H.	1.088		"
Alexander street.....	"	"	L.			"
Total 10-inch.....	C. P.	8-in.	L.	6	8-in.	Lowered on account of 20-inch line.
Lovejoy place.....	"	"	H.	8	"	"
" "	"	"	L.	6	6-in.	"
At Beverly street.....	"	"	H.	6	{ 6 and 8-in.	On account of tunnel.
At Congress street.....	"	"	L.	21	16-in.	"
" State street (south side).....	"	"	H.	258	6-in.	Acc't of grade crossing abolishment.
Between Washington and Devonshire sts.....	E. B.	"	L.			
Sumner and Maverick streets.....	"	"	L.			
Bremen street.....						

WATER DEPARTMENT.

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Huntington avenue.....	At Longwood avenue.....		14	8-in.			
Ruggles street.....	" Warwick street.....	" Rox.	"	"	Lowered on account of 48-inch line.	Raised on account of sewer.	
Minot street.....	Opposite Saranac street.....	Dor.	"	H.	11	"	"
Centre street.....	" Melbourne street.....	"	"	H.	22	"	Lowered on account of gas pipe.
Tokio street.....	At Oakland brook.....	"	"	H.	28	"	Lowered on account of sewer.
Sycamore street.....	" Hawthorn street.....	W. R.	"	H.	4	"	Raised on account of sewer.
Primrose street (formerly Proctor street).....	Between Fairview and Walter streets.....		"	H.	449	"	Lowered on account of street grade.
Meehan street.....	At Williams street.....		"	H.	93	6-in.	On account of Stony brook.
Houston street.....	Between Metcalf and Linden streets.....		"	H.	202	8-in.	On account of sewer.
Linden street.....	From Houston street.....		"	H.	133	"	"
Commonwealth avenue.....	At Allston street.....	Bri.	"	L.	361	"	On account of Metropolitan sewer.
Shirley street.....	Between Beach road and Cross street.....	Win.	"	L.	23	"	Moved off private property.
	Total 8-inch.....				<u>1,653</u>		
Marshall street.....	At Hanover street.....	C. P.	6-in.	L.	18	6-in.	On account of tunnel.
State street (north side)....	Between Washington and Devonshire sts.....	"	"	H.	39	.16-in.	"
Ash street.....	At Nassau street.....	"	"	L.	22	6-in.	On account of Boston Elevated Rail-way Company.
Oak place.....	" Oak street.....		"	L.	22	"	On account of Boston Elevated Rail-way Company.
Chardon street.....	" Chardon court.....		"	L.	5	"	On account of sewer.
Murray court.....	From Orleans street.....	E. B.	"	L.	80	4-in.	Acc't of grade crossing abolition.
Westminster street.....	At Sterling street.....	Rox.	"	L.	24	6-in.	On account of sewer.
St. Alphonsus street.....	" Longwood avenue.....	"	"	L.	12	"	Lowered on account of 48-inch line.
	Carried forward.....				<u>222</u>		

Mains Relocated. — Concluded.

LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.	Size before Relocation.	REMARKS.
<i>Brought forward.</i>						
Phillips street.....	At Longwood avenue.....	Rox.	6-in.	L.	222	Lowered on account of 48-inch line.
Halleck street.....	" Prentiss street.....	"	"	L.	14	" " " "
Prentiss street.....	" Parker street.....	"	"	L.	40	" " " "
Batavia street.....	" St. Stephens street.....	"	"	L.	11	Lowered on account of sewer.
St. Alphonsus street.....	" Longwood avenue.....	"	"	L.	15	Raised on account of 48-inch line.
Dorchester avenue.....	" Beale street.....	Dor.	"	H.	11	Lowered on account of gas pipes.
E street.....	" Tudor street.....	S. B.	"	L.	19	Offset on account of sewer.
Total 6-inch.....					350	
Beverly street.....	Between Causeway st. and Lovejoy pl.....	C. P.	4-in.	L.	86	On account of 20-inch main.
Total 4-inch.....					86	

Statement of Private Mains Laid during the Year Ending January 31, 1908.

(Not included in Statement of Total Length of Boston Water Department System.)

FOR WHOM.	Where.	District.	Size.	Nominal Pressure.	Number of Feet.
Institutions Dept....	Deer Island, at reservoir.....	B.H.	12-in.	L.	110
" "	" " rear of butcher's shop.	"	"	L.	3
" "	" " " " "	"	8-in.	L.	38
" "	" " between receiving house and reservoir.....	"	"	L.	257
" "	Austin Farm, between Austin and Morton streets, in front of Stedman building.....	W.R.	6-in.	H.	125

MAINS ABANDONED.

Statement of Location, Size, Nominal Pressure and Number of Feet Abandoned during the Year Ending January 31, 1908.

	LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.
Tremont street....	At Prentiss street.....	Rox.	36-in.	L.	15
	Total 36-inch.....				15
" "	At Prentiss street.....	Rox.	30-in.	L.	34
	Total 30-inch.....				34
Washington street,	Between State st. and Court ave.....	C. P.	24-in.	L.	174
" "	At Court avenue.....	"	"	L.	50
Dudley street....	Between Magnolia and Nonquit sts...	Dor.	"	L.	485
	Total 24-inch.....				709
Beverly street....	Between Causeway street and Warren bridge.....	C. P.	20-in.	L.	295
	Total 20-inch.....				295
Atlantic avenue....	At Congress street.....	C. P.	16-in.	L.	34
State street (north side)....	Between Washington and Devonshire streets.....	"	"	L.	169
Boylston street....	At Washington street.....	"	"	H.	50
Winter street....	" " "	"	"	H.	48
	Total 16-inch.....				301

Mains Abandoned.—Continued.

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.
Franklin street....	At Washington street.....	C. P.	12-in.	L.	82
" "	" " "	"	"	H.	99
" "	" " "	"	"	L.	60
" "	" " "	"	"	L.	30
Washington street,	Between Hanover and Union streets..	"	"	L.	150
Dock square.....	At Devonshire street.....	"	"	L.	15
Washington street,	" Court avenue.....	"	"	L.	50
State street (south side).....	Bet. Washington and Devonshire sts..	"	"	H.	126
State street (south side).....	" " " " ..	"	"	H.	80
State street (south side).....	" " " " ..	"	"	L.	30
Devonshire street..	At State street (south side).....	"	"	L.	23
Washington street,	" " " " ..	"	"	H.	22
" "	" " " (north side).....	"	"	H.	21
Haymarket square,	Across subway.....	"	"	L.	3
Summer street....	At Washington street.....	"	"	H.	14
Washington street,	At Castle street, at Boston Elevated Railway Company pier.....	"	"	L.	21
" "	At Castle street, on N. Y., N. H. & H. R.R. bridge.....	"	"	L.	85
Oak street.....	Bet. Washington st. and Harrison ave.	"	"	L.	204
Matthews street...	At Congress street.....	"	"	L.	12
Franklin street....	" " "	"	"	L.	12
" "	" " "	"	"	H.	11
Maverick street....	Between Chelsea and Frankfort sts... E. B.	"	"	L.	723
Sumner street....	At railroad crossing.....	"	"	L.	60
Bennington street..	" Bremen street.....	"	"	L.	40
Saratoga street (north side)....	Between Chelsea and Swift streets....	"	"	L.	237
Saratoga street (south side)....	" " " " ..	"	"	L.	577
Saratoga street....	Near Swift street.....	"	"	L.	19
Sumner street....	Between Orleans and Cottage streets..	"	"	L.	265
Orleans street....	" Sumner and Webster streets.	"	"	L.	92
Sumner street....	" Maverick and Bremen streets,	"	"	L.	194
Marginal street....	" Orleans and Lewis streets...	"	"	L.	115
	<i>Carried forward.....</i>				3,472

Mains Abandoned.—Continued.

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.
	<i>Brought forward.....</i>				3,472
St. Stephen street..	At Gainsboro street.....	Rox.	12-in.	L.	11
Tremont street....	" Prentiss street.....	"	"	L.	22
Vernon street.....	" Shawmut avenue.....	"	"	L.	18
Longwood avenue..	Across Brookline avenue.....	"	"	L.	40
" " ..	At Phillips street.....	"	"	L.	10
" " ..	At Brookline avenue.....	"	"	L.	58
" " ..	" " " ..	"	"	L.	16
" " ..	" Parker street.....	"	"	L.	40
Adams street.....	" Cedar Grove Bridge.....	Dor.	"	H.	96
" " ..	" Minot street.....	"	"	H.	12
Dudley street.....	Between Nonquit and Magnolia sts...	"	"	L.	573
Fifth street.....	Over railroad bridge.....	S. B.	"	H.	46
	<i>Total 12-inch.....</i>				<u>4,414</u>
Bremen street.....	Between Bennington and Saratoga sts.	E. B.	10-in.	L.	173
Maverick street....	" Chelsea and Frankfort sts....	"	"	L.	390
Bremen street.....	" Maverick and Gove streets...	"	"	L.	220
" " ..	At Saratoga street.....	"	"	L.	100
Ruggles street....	" Warwick street.....	Rox.	"	L.	3
Prentiss street....	" Tremont street.....	"	"	L.	18
	<i>Total 10-inch.....</i>				<u>904</u>
Devonshire street..	Between Dock sq. and State street ...	C. P.	8-in.	L.	317
State st. (south side)	" Washington and Devonshire streets	"	"	H.	80
Devonshire street..	At State street (south side).....	"	"	H.	14
North Market st...	Between Commercial street and Mer- chants row.....	"	"	L.	23
Hawes street.....	Between Congress and Kilby streets...	"	"	L.	37
Lovejoy place....	At Beverly street	"	"	L.	15
" " ..	" " " ..	"	"	H.	6
High street.....	" Congress street.....	"	"	L.	94
Purchase street....	" " " ..	"	"	L.	43
Congress street	Bet. Atlantic ave. and Franklin street.	"	"	L.	882
Orleans street....	" Everett and Gove streets	E. B.	"	L.	447
" " ..	" Sumner and Everett streets.....	"	"	L.	275
	<i>Carried forward.....</i>				<u>2,233</u>

Mains Abandoned.—Continued.

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.
	<i>Brought forward.....</i>				2,233
Orleans street.....	Bet. Sumner and Webster streets.....	E. B.	8-in.	L.	214
Simmons street ...	" Vernon and Linden Park streets..	Rox.	"	L.	13
Huntington ave. .	At Longwood avenue.....	"	"	L.	12
Halleck street.	" Prentiss street.....	"	"	L.	14
Ruggles street....	" Warwick street.....	"	"	L.	7
Minot street.....	Opposite Saranac street.....	Dor.	"	H.	10
Centre street.....	" Melbourne street.....	"	"	H.	20
Tokio street.....	At Oakland Brook.....	"	"	H.	25
Clifton street.....	" Dudley street.....	"	"	L.	220
Sycamore street... .	" Hawthorne street.....	W. R.	"	H.	4
Primrose st. (for- merly Proctor st.)	Between Fairview and Walter streets ..	"	"	H.	449
Houston street.... .	" Metcalf and Linden streets...	"	"	H.	198
Academy Hill rd... .	To old H. S. reservoir.....	Bri.	"	H.	141
Commonwealth av.	At Allston street.....	"	"	L.	360
Shirley street.....	Between Beach road and Cross street .	Win.	"	L.	494
	<i>Total 8-inch.....</i>				<u>4,414</u>
North Market st... .	Between Commercial street and Mer- chants row.....	C. P.	6-in.	L.	552
Marshall street.... .	At Hanover street.....	"	"	L.	18
Ash street.....	" Nassau street.....	"	"	L.	20
" "	Between Oak and Nassau streets.....	"	"	L.	164
Hawes street.....	" Congress and Kilby streets. .	"	"	L.	103
Church street.....	" Providence and Boylston sts. .	"	"	L.	169
Providence street.. .	" Park sq. and Berkeley street. .	"	"	L.	230
Oak place.....	At Oak street.....	"	"	L.	22
Chardon street.... .	" Chardon court.....	"	"	L.	5
Channing street ...	" Congress street.....	"	"	L.	6
Devonshire street.. .	" State street (south side).....	"	"	H.	12
Bremen street.....	Between Maverick and Sumner sts... .	E. B.	"	L.	237
" "	" Bennington and Saratoga sts. .	"	"	L.	520
Everett street.....	At Orleans street.....	"	"	L.	38
Prescott street.... .	Between Chelsea and Bremen streets..	"	"	L.	214
Webster street.... .	At Orleans street.....	"	"	L.	39
Bremen street.....	Between Sumner and Maverick sts.... .	"	"	L.	258
	<i>Carried forward.....</i>				<u>2,607</u>

Mains Abandoned.—*Continued.*

LOCATION.	District.	Size.	Nominal Pressure.	Number of Feet.	
<i>Brought forward</i>				2,607	
Webster street.....	Between Orleans and Lewis streets....	E. B.	6-in.	L.	191
Westminster street	At Sterling street.....	Rox.	"	L.	20
Winslow street.....	Between Eustis and Palmer streets ...	"	"	L.	316
Palmer street.....	Across Winslow street	"	"	L.	70
Eustis street.....	Between Mall and Albany streets.....	"	"	L.	140
Simmons street.....	" Vernon and Linden Park sts.	"	"	L.	655
St. Alphonsus st... .	At Longwood avenue.....	"	"	L.	10
Phillips street.	" " "	"	"	L.	16
Prentiss street . . .	Between Columbus av. and Mindora st.	"	"	L.	63
" "	At Parker street.....	"	"	L.	35
Proposed street....	First off St. Stephen street, first left from Bryant street.....	"	"	L.	24
Jarvis street.....	At St Stephen street.....	"	"	L.	37
Batavia street.....	" " "	"	"	L.	10
Highland street....	Between Eliot square and Millmont st.	"	"	H.	715
Millmont street....	" Highland st. and Lambert av.	"	"	H.	679
Lambert avenue...	At Millmont street.....	"	"	H.	16
St Alphonsus st... .	" Longwood avenue.....	"	"	L.	13
Proposed street....	Off Huntington avenue, first right south from Parker street.....	"	"	L.	26
Magnolia street....	Between Quincy and Half Moon sts...	Dor.	"	H.	1,531
Dorchester avenue.	At Beals street.....	"	"	H.	10
Alexander street...	" Dudley street.	"	"	H.	235
Magnolia street....	" Quincy street.....	"	"	H.	16
" "	" Dudley street.....	"	"	H.	131
Humphreys street .	" " "	"	"	L.	78
K street.....	Between First and Fourth streets....	S. B.	"	L.	1,575
Second street.....	At K street.....	"	"	L.	57
Third street.....	" " "	"	"	L.	51
Emerson street....	" " "	"	"	L.	15
Fifth street.	Over railroad bridge.....	"	"	H.	47
E street.....	At Tudor street.....	"	"	L.	18
Chestnut square. . .	Off Chestnut avenue.	W. R.	"	H.	108
Linden street.....	From Houston street.....	"	"	H.	133
	<i>Carried forward</i>				9,648

Mains Abandoned.—Concluded.

LOCATION.		District.	Size.	Nominal Pressure.	Number of Feet.
	<i>Brought forward.....</i>				9,648
Jackson avenue....	Between Chestnut Hill avenue and Academy Hill road.....	Bri.	6-in.	H.	376
Academy Hill rd...	Between Jackson and Mt. Vernon aves.	"	"	H.	240
George street.....	" Hamblen st. and railroad....	Chsn.	"	L.	26
Hamblen street....	At George street.....	"	"	L.	8
	Total 6-inch.....				10,298
Beverly street....	Bet. Causeway st. and Warren bridge.	C. P.	4-in.	L.	91
" "	" Causeway st. and Lovejoy place..	"	"	L.	86
Murray court.....	Off Orleans street.....	E. B.	"	L.	267
Highland place....	" Highland street.....	Rox.	"	H.	168
Kenilworth street..	From Dudley street to Dudley street..	"	"	H.	554
	Total 4-inch.....				1,166
George street.....	Between Hamblen st. and railroad (cement pipe).....	Chsn.	3-in.	L.	218
	Total 3-inch.....				218

WATER DEPARTMENT.

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Table Showing Length of Distribution Mains Laid and Abandoned during the Year 1907, and the Total Length of the Distribution System of the City of Boston
January 31, 1908.

	DIAMETER OF MAINS IN INCHES.												Totals.				
	48	42	40	36	30	28	24	20	16	12	10	8	6	4	3	2	
Total connected with system January 31, 1907.....	35,052	16,813	23,104	43,376	89,146	244	77,448	94,656	202,952	1,199,423	154,184	606,850	1,299,373	68,766	6,245	8,592	3,926,224
Length laid during the year.....	3,211	.....	.....	112	984	.....	824	313	2,422	14,770	9,961	12,612	2,444	102	.....	47,755
Length abandoned during the year.....	.....	.....	15	34	.....	709	295	301	4,414	904	4,414	10,298	1,166	218	.....	22,768
Total connected with system January 31, 1908.....	38,263	16,813	23,104	43,473	90,096	244	77,563	94,674	205,073	1,209,779	163,241	615,048	1,291,519	67,702	6,027	8,592	3,951,211 or 748.3 miles

Statement of Hydrant, Blow-off and Reservoir Pipes January 31, 1908.

Diameter in inches.								Totals.	
16	12	10	9	8	6	4	3		
Total length connected with system January 31, 1907.....	474	6,536	105	2,438	2,330	42,082	6,490	44	60,499
Length laid and relaid during the year.....			26	.....	311	775	5	.....	1,117
Length abandoned during the year.....		6	5	15	149	187	111	.....	473
Total length connected with system January 31, 1908.....	474	6,530	126	2,423	2,492	42,670	6,384	44	61,143

Main Gates Established and Abandoned during the Year, and Number in System January 31, 1908.

Private Gates.

	DIAMETER IN INCHES.		Totals.
	8	12	
Established during the year.....	2	1	3
Abandoned during the year.....			
Increase.....	2	1	3

Blow-off Gates.

	DIAMETER IN INCHES			Totals.
	4	6	10	
Established during the year.....	1	2	2	5
Abandoned during the year	4	1		5
Increase (+) or decrease (-).....	-3	+1	+2	

Hydrant Gates.

	DIAMETER IN INCHES.		Totals.
	6	8	
Total number in system January 31, 1907.....	20	10	30
Established during the year.....	3	19	22
Abandoned during the year.....			
Total number in system January 31, 1908.	23	29	52

Private Hydrant Gates.

	DIAMETER.	Totals.
	6 Inches.	
Total number in system January 31, 1907.....	1	1
Established during the year.....	1	1
Abandoned during the year.....	2	2
Total number in system January 31, 1908.....	4	4

Hydrants Established and Abandoned during the Year.

	ESTABLISHED.					ABANDONED.					
	Lowry.	Boston Lowry.	Ordinary Post.	Bachelder Post.	Totals.	Lowry.	Boston Lowry.	Ordinary Post.	Bachelder Post.	Boston.	Totals.
City Proper (public).....	9	1	1	14	25	15	1	3	1	4	24
" (private).....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	2
Roxbury (public).....	2	6	1	24	33	12	8	3	.....	3	26
West Roxbury (public).....	1	15	10	17	43	2	17	4	.....	1	24
" (private).....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Brighton (public).....	1	2	.....	4	7	1	1	.....	.....	2	4
Dorchester (public).....	2	17	1	45	65	13	18	3	1	.....	35
South Boston (public).....	1	2	.....	11	14	6	1	3	.....	6	16
East Boston (public).....	1	7	1	12	21	5	5	5	.....	1	16
Charlestown (public).....	.....	1	1	3	5	1	.....	1	1	.....	3
Deer Island (private).....	.....	3	.....	3	.....	.....	3	.....	.....	.....	3
Total number of public.....	17	51	15	130	213	55	51	22	3	17	148
Total number of private.....	.....	4	.....	4	.....	.....	4	.....	1	.....	5

Total Number of Hydrants Connected with Distribution System January 31, 1908.

	Lowry.	Boston Lowry.	Ordinary Post.	Bachelder Post.	Boston.	Smith.	Totals.
City Proper (public)	613	49	255	446	113	....	1,476
" (private)	4	.....	9	4	40	....	57
Roxbury (public)	485	91	435	268	38	....	1,317
" (private)	2	1	.....	3	10	....	16
West Roxbury (public)	106	235	658	128	28	....	1,155
" (private) . . . . .	.....	.....	16	.....	1	....	17
Brighton (public)	74	89	391	31	18	....	603
" (private) . . . . .	.....	.....	7	.....	2	....	9
Dorchester (public)	404	242	965	287	28	....	1,926
" (private) . . . . .	.....	1	3	4	4	....	12
South Boston (public)	190	32	142	196	36	1	597
" (private)	3	.....	15	.....	28	....	46
East Boston (public)	115	34	180	94	6	....	429
" (private)	8	.....	7	.....	25	....	40
Charlestown (public)	169	39	33	91	2	....	334
" (private)	14	1	37	.....	6	....	58
Deer Island (private) . . . . .	.....	.....	20	.....	.....	.....	20
Long Island (private) . . . . .	.....	.....	7	.....	.....	.....	7
Thompson's Island (private) . . . . .	.....	.....	2	.....	.....	.....	2
Gallop's Island (private) . . . . .	.....	.....	1	.....	1	....	2
Rainsford Island (private) . . . . .	.....	3	1	.....	1	....	5
Quincy (private) . . . . .	.....	1	11	.....	.....	.....	12
Brookline . . . . .	.....	2	.....	.....	.....	.....	2
Total number of public hydrants,	2,156	811	3,059	1,541	269	1	7,837
Total number of private and suburban hydrants	31	9	136	11	118	....	305

Water Posts.

LOCATION OF WATER POSTS ESTABLISHED AND ABANDONED DURING THE YEAR.

Established.

Haymarket square, opposite 34 Washington street North, City Proper, Centre street and La Grange street, West Roxbury.

Abandoned.

Haymarket square, at Relief Station, City Proper.
 Townsend street, at Humboldt avenue, Roxbury.
 Centre street, at La Grange street, West Roxbury.
 Hyde Park avenue, near Canterbury street, West Roxbury.
 Ninth street, at Old Harbor street, South Boston.
 Orleans street, at Sumner street, East Boston.

Table Showing Total Number of Water Posts Connected with System January 31, 1908.

DISTRICTS.	Number Connected with System January 31, 1907.	Established during the year.	Abandoned during the year.	Number Connected with System January 31, 1908.
City Proper.....	76	1	1	76
Roxbury.....	81	.....	1	80
West Roxbury.....	99	1	2	98
Brighton.....	54	.....	.....	54
Dorchester.....	108	.....	.....	108
South Boston.....	40	.....	1	39
East Boston.....	44	.....	1	43
Charlestown.....	22	.....	.....	22
Totals.....	524	2	6	520

Fountains.*Style.**Established during the Year.*

- E. Washington street, at Old State House, City Proper.
 C. North Bennet street, at bath house, City Proper.
 C. Dorchester avenue, at Savin Hill avenue, Dorchester.

Abandoned during the Year.

- A. Albany street, at Union Park street, City Proper.
 E. Washington street, at Old State House, City Proper.
 C. Dale street, near Bainbridge street, Roxbury.
 F. Neponset avenue, at playgrounds, Dorchester.
 B. Junction of Bennington and Saratoga streets, East Boston.

Number of Fountains in Service January 31, 1908.

DISTRICTS.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.	Style G.	Totals.
City Proper.....	8	4	8	.....	12	.....	.....	32
Roxbury.....	9	3	1	.....	5	.....	.....	18
West Roxbury.....	5	1	.....	1	2	.....	.....	9
Brighton.....	5	.....	1	.....	.....	.....	.....	6
Dorchester.....	.....	2	2	1	.....	7	1	13
South Boston.....	3	1	3	.....	4	.....	.....	11
East Boston.....	.....	3	3	.....	4	.....	.....	10
Charlestown.....	1	3	.....	.....	4	.....	.....	8
Totals.....	31	17	18	2	31	7	1	107

*Style.***NOTE.**

- A. Indicates fountain for man and beast, with automatic fixtures for man and beast in warm weather, and a continuous flow of water for beasts in cold weather.
 B. Indicates fountains for beasts only. Continuous flow of water all the year.
 C. Indicates fountains for man only. Automatic fixtures. In service during warm weather only.
 D. Indicates fountains for man and beast. Automatic fixtures for both. In service during warm weather only.
 E. Indicates cold water fountains for man only. Automatic fixtures. In service during warm weather only.
 F. Indicates fountains for man and beast, with automatic fixtures for man in warm weather, and a continuous flow of water for beasts all the year.
 G. Indicates fountains for man and beast. Hygiene "bubble" fixtures for man. Continuous flow of water for man and beast all the year.

*Air Cocks.**Established.*

LOCATION.	District.	Diameter of Main.	Nominal Pressure.	Size of Air Cock.
Washington street at Court avenue, south of 24-inch gate.	C. P.	24-in.	Low	2-in.
Washington street, at Court avenue, north of 24-inch gate,	"	"	"	"
Congress street, at Franklin.....	"	30-in.	"	"
Congress street, at High.....	"	"	"	"
Maverick street, at railroad bridge.....	E. B.	12-in.	"	1½-in.
Prescott street, at railroad bridge.....	"	"	"	"
Saratoga street, at railroad bridge.....	"	"	"	"
Fourth street, on bridge over old N. E. R.R.....	S. B.	20-in.	"	2-in.
Fifth street, on bridge over old N. E. R.R.....	"	12-in.	High	1½-in.
Fifth street, on bridge over old N. E. R.R.....	"	"	Low	"
Prentiss street, at Tremont street.....	Rox.	48-in.	"	2-in.
Tremont street, at Prentiss street.....	"	36-in.	"	"
Prentiss street, at Parker street.....	"	48-in.	"	"
Longwood avenue, at Huntington avenue.....	"	"	"	"
Longwood avenue, at St. Alphonsus street.....	"	"	"	"
Longwood avenue, at No. 48.....	"	"	"	"
Longwood avenue, at No. 24.....	"	"	"	"
Longwood avenue, east of Brookline avenue, east of 36-inch gate.....	"	"	"	"
Longwood avenue, east of Brookline avenue, west of 36-inch gate.....	"	"	"	"
Longwood avenue, west side Brookline avenue, at cap on 48-inch Main.....	"	"	"	1-in.
Tremont street, at Roxbury Crossing, north of 36-inch gate	"	36-in.	"	2-in.
Adams street, at N. Y., N. H. & H. R.R. bridge.....	Dor.	12-in.	High	1½-in.

Abandoned.

Washington street, at Court avenue, north of 24-inch gate,	C. P.	24-in.	Low	2-in.
--	-------	--------	-----	-------

Blow-offs.*Established.*

LOCATION.	District.	Diameter of Main.	Nominal Pressure.	Size of Gate or Cock Controlling Blow-off.
Church street, between Providence and Boylston streets,	C. P.	10-in.	Low	4-in.
Congress street, at Franklin street.....	"	30-in.	"	6-in.
Prentiss street, at N. Y., N. H. & H. R.R. bridge.....	Rox.	48-in.	"	"
Longwood avenue, at Vila street.....	"	"	"	10-in.
Longwood avenue, opposite No. 91.....	"	"	"	"

Abandoned.

Church street, between Providence and Boylston streets,	C. P.	6-in.	Low	6-in.
Bremen street, at Maverick street.....	E. B.	10-in.	"	4-in.
Saratoga street, at junction of Bremen street.....	"	12-in.	"	"
Longwood avenue, at Binney street.....	Rox.	"	"	"
Shirley street, between Beach road and Cross street.....	Win.	8-in.	"	"

Fire Reservoirs.

Connections with Boston Water Department system abandoned at:

Congress street, at High street, City Proper.

Millmont street, opposite No. 20, Roxbury.

Kenilworth street, at Dudley street, Roxbury.

Statement of Service Pipes Laid and Abandoned during Year Ending January 31, 1908.

SIZES OF SERVICES LAID AND ABANDONED.	City PROPER.	ROXBURY.		WEST ROXBURY.		BRIGHTON.		DOR- CHESTER.		SOUTH BOSTON.		EAST BOSTON.		CHARLES- TOWN.		TOTAL.			
		Length in Feet.	Number of Services.																
8-inch laid.....																			
6-inch laid.....																			
4-inch laid.....	12	388	4	167	1	33	1	19	2	14	5	198	2	55	1	15	1	19	
" abandoned.....																	27	870	
3-inch laid.....																			
" abandoned.....	8	167	1	16	1	16	1	12	1	18	1	18	1	20	3	20	4	37	
2-inch laid.....																			
" abandoned.....	13	429	2	48	2	147	1	178	1	10	2	44	6	239	1	32	2	24	
1½-inch laid.....																			
" abandoned.....	27	391	2	36	1	19	1	4	1	7	1	17	1	29	1	32	2	45	
1¼-inch laid.....																			
" abandoned.....	1	18	1	24	1	57	1	24	1	22	1	22	1	21	1	21	6	163	
1-inch laid.....																			
" abandoned.....	20	460	9	178	1	13	1	81	4	31	4	123	2	43	2	33	2	40	
¾-inch laid.....																			
" abandoned.....	25	587	14	606	23	469	14	361	21	440	7	230	20	756	4	113	8	3,562	
½-inch laid.....																			
" abandoned.....	4	285	143	1,136	3,168	128	2,749	44	951	298	6,746	25	486	85	1,850	9	305	8	390
¼-inch laid.....																			
" abandoned.....	61	2,056	37	594	2	47	1	16	16	34	788	175	11	268	3	96	154	4,040	
½-inch abandoned.....																			
" abandoned.....	7	113	10	167	107	167	107	167	107	167	107	167	107	167	107	167	27	540	
Total Laid.....	151	3,633	185	4,373	153	3,261	67	1,482	328	7,385	46	1,213	112	2,759	19	518	1,061	24,624	
Total Abandoned.....	86	2,642	52	957	3	51	2	23	37	863	11	342	13	317	12	255	216	5,450	
Net Increase.....	65	991	133	3,416	150	3,210	65	1,459	291	6,522	35	871	99	2,442	7	263	845	19,174	

Total Number and Aggregate Length of Service Pipes of Various Sizes Connected with Distribution System January 31, 1908.

Sizes.	Total Number.	Aggregate Length.
16-inch.....	1	9 feet
12-inch.....	14	3,542 "
10-inch.....	1	1,325 "
8-inch.....	22	2,652 "
6-inch.....	144	21,639 "
4-inch.....	1,092	45,021 "
3-inch.....	698	21,323 "
2-inch.....	1,829	59,018 "
1½-inch.....	1,246	38,625 "
1¼-inch.....	313	10,115 "
1-inch.....	2,273	128,692 "
¾-inch.....	2,479	91,543 "
½-inch.....	76,933	2,183,097 "
¼-inch.....	7,002	160,452 "
Total.....	94,047	2,767,053 feet

Maintenance Work of Miscellaneous Character Performed during the Year Ending
January 31, 1908.

	Total number during the year.
Brick gate chambers built around new gates	3
Brick gate chambers built, replacing wooden boxes	2
Bridge boxes covering main pipe repaired	20
Deacon meter boxes removed	5
Deacon meter boxes repaired	6
Dead ends blown off	140
Fire reservoir covers renewed	3
Fountain repairs	346
Fountains and troughs cleaned and inspected	3,526
Gate box covers salted in cold weather	2,547
Gate box covers and frames renewed	184
Gate boxes cleaned of mud, water and snow	754
Gate boxes inspected	284
Gate boxes raised and lowered	146
Gate boxes renewed	331
Gate boxes repaired	1,341
Gates in service oiled and tested for general efficiency	260
Gates inspected	2,180
Gates repaired	72
Hydrant barrels changed on account of street grading	47
Hydrant barrels changed for various reasons	70
Hydrant box frames and covers renewed	260
Hydrant boxes cleaned of mud, water and snow	1,340
Hydrant boxes raised or lowered	98
Hydrant boxes renewed	349
Hydrant boxes repaired	307
Hydrant cap chains repaired	1,127
Hydrant inspections in cold weather	107,847
Hydrant nozzles fitted with leather washers	865
Hydrants hayed in cold weather	368
Hydrants in service oiled and tested for general efficiency	822
Hydrants painted	3,648
Hydrants repaired	551
Hydrants thawed out	108
Investigations made where further action on part of Water Department was unnecessary	979
Locations of gates marked	6,792
Main pipe repairs, causes as follows:	
Blasting	2
Broken pipe	13
Burst pipe	3
Frost	4
Joints blown out	3
Joints leaking	203
No cause assigned	112
Operations of Boston Transit Commission	94
Operations of Boston Consolidated Gas Company	2
Pick hole	1
Settlement	40
Vibration	2
Pavement repairs	1,470
Service pipe repairs, causes as follows:	
Blasting	4
Broken by foundation wall	2
Broken by steam roller	9
Defective couplings	70
Defective joints	20

	Total number during the year.
Defective packing	6
Defective pipes	226
Eaten by earth	1
Electrolytic action	8
Frost	65
Gnawed by rats	3
Main cocks required renewal	70
Main uprights	37
Operations of Boston Consolidated Gas Company	1
Operations of Boston Elevated Railway Company	10
Operations of Boston Transit Commission	46
Operations of Edison Electric Illuminating Company	1
Operations of New England Telephone and Telegraph Company,	1
Operations of Sewer Department and its agents	70
Settlement of earth	340
Settlement of service boxes on pipes	10
Sidewalk cocks required renewal	80
Sidewalk uprights above and below grade	31,106
Sidewalk uprights in way of edgestones	10
Sidewalk uprights required renewal	249
Sidewalk uprights (nuts) required oiling	24,840
Stopped by dirt	56
Stopped by fish	7
Stopped by gasket	1
Stopped by rust and sediment	466
Struck by pick	24
Service pipes shut off and let on to allow owners to make repairs,	602
Sidewalk uprights inspected	26,110
Temperatures of water in cold water fountains taken in summer season	434
Water post repairs of various kinds	49
Water posts shut off and let on during cold weather	989

Statement of Stock Manufactured from the Rough in the Machine Shop, Blacksmith Shop and Carpenter Shop during the Year Ending January 31, 1908.

MACHINE AND BLACKSMITH SHOPS.

Bolts:		Nipples, meter:	
Boston Lowry hydrant.....	327	$\frac{5}{8}$ -inch.....	203
Lowry hydrant.....	424	$\frac{3}{4}$ "	47
Lowry hydrant extension.....	61	$1\frac{1}{2}$ "	55
Post hydrant.....	913	2"	104
Post hydrant extension.....	32	Nipples, solder, female:	
Stretching, $\frac{3}{4}$ -inch.....	6	$\frac{3}{4}$ -inch $\times \frac{5}{8}$ -inch.....	570
Eye bolts, $1\frac{1}{8}$ -inch.....	12	Nipples, solder, male:	
Fountain.....	16	$\frac{3}{4}$ -inch.....	165
Bushings:		1"	240
Puddling head, $1\frac{1}{2}$ -inch.....	14	$1\frac{1}{4}$ "	50
Cocks, corporation, angle: $\frac{5}{8}$ -inch.....		$1\frac{1}{2}$ "	56
Cocks, corporation, lever handle: $\frac{5}{8}$ -inch.....	123	Nuts, combination coupling:	
Cocks, corporation, straight: $\frac{5}{8}$ -inch.....	20	$1\frac{1}{2}$ -inch.....	87
$\frac{3}{4}$ "		2"	19
$\frac{3}{4}$ " (iron pipe).....		Nuts, coupling:	
1"	981	$\frac{5}{8}$ -inch.....	7,694
1" (iron pipe).....	134	$\frac{3}{4}$ "	397
$1\frac{1}{2}$ "	327	$1\frac{1}{4}$ "	200
$1\frac{1}{2}$ "	169	$1\frac{1}{2}$ "	355
$1\frac{1}{2}$ "	24	2"	75
Cocks, sidewalk: $\frac{5}{8}$ -inch.....	105	Nuts, Deacon meter.....	84
$\frac{3}{4}$ "	1,139	Pins, gate:	
$\frac{3}{4}$ " (iron pipe).....	79	$\frac{9}{16}$ -inch.....	2,214
1"	58	Pins, gate, oil.....	440
Couplings, bent: 1-inch.....	6	Plugs, iron:	
1"	13	$\frac{5}{8}$ -inch.....	499
Couplings, combination: $1\frac{1}{2}$ -inch.....	25	Reducers, meter:	
Couplings, hose: 2-inch.....	41	$\frac{5}{8}$ -inch.....	293
3" female.....	122	$\frac{3}{4}$ "	756
Couplings, male: $\frac{5}{8}$ -inch.....	333	1"	294
$\frac{3}{4}$ "	22	Rings, fountain.....	550
1"	235	Rings, hydrant cap.....	169
1"	107	Set screws:	
1"	25	$\frac{7}{8}$ -inch.....	2,256
2"	77	1"	78
Hydrants:		Sidewalk uprights.....	1,803
Bachelder post.....	84	Tubes, bent coupling:	
Boston Lowry.....	20	$1\frac{1}{2}$ -inch.....	34
Boston post, slide valve.....	4	2"	42
Lowry hydrants.....	49	Tubes, coupling:	
Jointers:		$\frac{5}{8}$ -inch.....	8,105
4-inch.....	7	1"	200
6"	26	$1\frac{1}{2}$ "	173
8"	23	2"	50
10"	15	Valves, air:	
12"	20	$1\frac{1}{2}$ -inch.....	3
16"	4	2"	18
20"	3	Valves, gate:	
24"	5	3-inch.....	15
30"	4	4"	45
36"	24	6"	25
40"	1	8"	67
48"	2	10"	49
		12"	39
		16"	15
		20"	3
		24"	2
		Wastes, hydrant:	
		Large.....	358

CARPENTER SHOP.

Boxes:		Boxes:	
Boston hydrant.....	12	Gate, small.....	506
Boston Lowry hydrant.....	79	Lowry hydrant.....	74
Deacon meter.....	3	Post hydrant.....	212
Gate, large.....	37		

CARPENTER SHOP.—*Concluded.*

Box pieces:		Box pieces:	
1-inch Boston hydrant.....	165	6-inch gate, small.....	40
1 " gate, large.....	125	6 " Lowry hydrant.....	16
1 " gate, small.....	538	9 " gate, small.....	48
1 " Lowry hydrant.....	725	10 " Boston hydrant.....	3
2 " Boston hydrant.....	112	10 " gate, small.....	32
2 " gate, large.....	50	Box tops:	
2 " gate, small.....	225	Gate, large.....	12
2 " Lowry hydrant.....	417	Gate, small.....	137
3 " Boston hydrant.....	86	Lowry hydrant.....	49
3 " gate, small.....	282	Post hydrant.....	50
3 " Lowry hydrant.....	147	Chocks, wooden.....	914
4 " Boston hydrant.....	31	Wooden horses.....	114
4 " gate, small.....	59	Wooden wedges.....	6,392

OLD STOCK RENOVATED BY MACHINE AND BLACKSMITH SHOPS.

Bolts:		Hydrants:	
Boston Lowry hydrant.....	9	Lowry.....	63
Lowry hydrant.....	65	Ordinary post.....	36
Post hydrant.....	16	Nipples, meter:	
1½-inch × 9-inch.....	12	¾-inch.....	21
1½-inch × 5-inch.....	20	Nuts, coupling:	
Cocks, corporation, angle:		½-inch.....	410
¾-inch.....	5	¾ ".....	23
Cocks, corporation, straight:		1 ".....	15
¾-inch.....	15	Tubes, coupling:	
1 "	5	½-inch.....	7
Cocks, sidewalk:		¾ ".....	76
½-inch.....	114	¾ ".....	28
Cocks, water post:		1 ".....	43
1½-inch.....	3	1½ ".....	4
Couplings, male:		1½ ".....	8
¾-inch.....	23	2 ".....	13
½ ".....	3	Valves, gate:	
1 ".....	3	3-inch.....	1
1½ ".....	1	4 ".....	2
1½ ".....	2	6 ".....	8
2 ".....	4	8 ".....	8
Hooks, "S" for hydrant chains.....	50	10 ".....	4
Hydrants:		16 ".....	4
Bachelder post.....	13	Wastes, hydrant:	
Boston.....	3	large.....	62
Boston Lowry.....	41		

In addition to the foregoing, the machine, carpenter, paint, plumbing and blacksmith shops performed much work of a miscellaneous nature in the maintenance and improvement of the property of the department. Some of the important items are as follows:

Repairs of various kinds in and around the shops	\$1,575	48
Repairs of various kinds in and around the yards	1,455	98
Repaired tools of all kinds	1,274	00
Painted and repaired wagons and carriages	1,230	68
Sharpened 12,020 picks, 4,846 chisels and 1,964 bars	1,063	96
Made 377 new tools of various kinds	988	51
Repairs in and around the stable	825	71
Made 73 new patterns	712	71
Repairs and improvements in City Hall for Income Division	328	29
Repaired patterns	122	63
Repaired signs in Boston harbor	100	98

REPORT OF THE ENGINEER.

CITY OF BOSTON,
ENGINEERING DEPARTMENT,
50 CITY HALL, January 31, 1908.

WILLIAM J. WELCH, ESQ.,

Water Commissioner:

DEAR SIR,— The following is the more important work done during the past year under the direction of the Engineering Department.

The work of laying the 48-inch low service main in Prentiss street, Parker street and Longwood avenue, from Tremont street to Brookline avenue, in progress last year, was completed. Connections were made with the 36-inch and 30-inch mains in Tremont street, with the 16-inch main in Huntington avenue and with the 40-inch main in Brookline avenue. The resulting increase of pressure on the low service system was about $3\frac{1}{2}$ pounds at time of maximum draft.

A 30-inch low service main, feeding directly from a 36-inch main, was laid in Congress street, from Franklin street to Atlantic avenue, with two 16-inch connections for reinforcing the distribution system, one at High street and one at Atlantic avenue; this line will form part of the proposed low service feed from the city proper to South Boston. A trestle, 450 feet in length, was built across Fort Point channel from the ends of the pipe tunnel, built in 1904, to the city proper and South Boston shores; this trestle is designed to carry 24-inch low service and 16-inch high service mains, and is part of the plan for the new service for South Boston.

The lowering of the grade of Dudley street, on account of the abolishment of the grade crossing of the New York, New Haven & Hartford R. R., made it necessary to relay 600 feet of 24-inch low service and 800 feet of 12-inch low service pipes. At the same time opportunity was taken to lay about 600 feet of 16-inch high service pipe, which will form part of a very necessary high service main designed to extend in Dudley street from Upham's corner to Washington street.

A considerable amount of work was also done in connection with the abolishment of grade crossings in East Boston on the line of the Boston & Albany R. R.

The work of relaying mains inadequate for fire protection was prosecuted less vigorously than for several years past, in all about two miles of relaying being done. This work of improving the distribution system and making it equal to the present demands for fire protection is of first importance and should be carried on with all possible speed.

The usual large amount of routine work, consisting of reports on petitions for main pipes and fire pipes, lines and grades for pipe laying, supervision of contracts and estimates of the same, preparation of plans of work done and proposed, tabulation of records, inspection of castings made in the local foundries, etc., was done during the year.

Surveys and investigations to determine the electrical conditions existing on the water pipe system have been carried on continuously.

Respectfully submitted,

WILLIAM JACKSON,

City Engineer.

Monthly Rainfall in Inches during 1907 in Various Places in Eastern Massachusetts.

PLACES.	Monthly Rainfall in Inches during 1907 in Various Places in Eastern Massachusetts.											Total.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.		
Framingham.....	3.41	2.18	1.79	3.05	3.53	3.20	1.71	1.07	8.32	3.83	5.84	4.17	42.10
Dam 4, Ashland.....	3.16	2.13	1.86	3.39	3.53	2.91	2.03	1.05	8.07	4.07	6.05	4.58	42.83
Cordaville.....	3.43	2.21	2.19	3.67	3.87	4.56	2.12	1.07	9.68	4.51	7.05	4.82	49.18
Lake Cochituate.....	3.14	2.18	1.88	3.47	3.62	2.89	1.45	1.27	7.62	3.96	5.63	3.66	40.77
Chestnut Hill Reservoir.....	3.80	3.31	2.44	3.72	4.06	3.39	1.49	1.79	10.02	3.65	7.91	6.25	51.83
Spot Pond.....	2.90	2.19	2.43	3.31	3.06	3.71	1.91	1.33	8.88	2.98	6.76	3.88	43.34
Cambridge Observatory.....	4.82	1.77	1.76	3.55	3.15	3.15	1.29	1.12	8.54	2.88	6.94	2.79	41.76
Waltham, Boston Manufacturing Company.....	2.87	2.49	2.03	3.99	3.45	2.76	1.56	1.19	8.97	3.62	7.14	4.06	44.13
Lowell, Locks and Canals Company.....	2.77	2.39	2.15	3.64	2.58	3.03	4.37	1.36	8.52	4.49	5.77	4.43	45.50
Main Drainage Yard, 795 Massachusetts avenue.....	3.85	1.79	1.75	2.94	2.90	3.14	1.05	1.52	7.93	2.82	6.81	4.08	40.58
Average for above ten places.....	3.42	2.26	2.03	3.47	3.38	3.27	1.90	1.28	8.66	3.68	6.59	4.27	44.20

the Stated Monthly Heights, in Feet, above City Base, to which Water Rose at Different Stations on the Boston Waterworks.

GENERAL STATISTICS.

BOSTON WATER DEPARTMENT.

Daily average amount used (gallons)	96,422,800
Daily average amount used through meters during 1907 (gallons)	21,588,400
Number of services February 1, 1908	94,047
Number of meters in service February 1, 1908	5,185
Number of meters under supervision February 1, 1908	116
Number of elevators under supervision February 1, 1908	586
Length of supply and distributing mains in miles Febru- ary 1, 1908	748.3
Number of public hydrants in use February 1, 1908	7,837
Yearly revenue from annual water rates (assessed)	\$1,338,121.74
Yearly revenue from metered water (assessed)	\$1,256,970.23
Percentage of total revenue from metered water	48.4
Yearly expense of maintenance	\$605,586.38

¹ BOSTON WATER BOARD.

ORGANIZED JULY 31, 1876.

- * TIMOTHY T. SAWYER, from July 31, 1876, to May 5, 1879; and from May 1, 1882, to May 4, 1883.
- * LEONARD R. CUTTER, from July 31, 1876, to May 4, 1883.
- * ALBERT STANWOOD, from July 31, 1876, to May 7, 1883.
- * FRANCIS THOMPSON, from May 5, 1879, to May 1, 1882.
- WILLIAM A. SIMMONS, from May 7, 1883, to August 18, 1885.
- GEORGE M. HOBBS, from May 4, 1883, to May 4, 1885.
- JOHN G. BLAKE, from May 4, 1883, to August 18, 1885.
- WILLIAM B. SMART, from May 4, 1885, to March 18, 1889.
- * HORACE T. ROCKWELL, from August 25, 1885, to April 25, 1888.³
- THOMAS F. DOHERTY, from August 26, 1885, to May 5, 1890; and from May 4, 1891, to July 1, 1895.
- ROBERT GRANT, from April 25, 1888, to July 17, 1893.³
- PHILIP J. DOHERTY, from March 18, 1889, to May 4, 1891.
- * JOHN W. LEIGHTON, from May 5, 1890, to July 1, 1895.
- WILLIAM S. McNARY, from August 15, 1893, to November 5, 1894.³
- CHARLES W. SMITH, from January 23, 1895, to July 1, 1895.

¹ WATER COMMISSIONERS.

- CHARLES W. SMITH, from July 1, 1895, to January 20, 1896.³
- JEREMIAH J. McCARTHY (Acting), from January 20 to February 1, 1896.
- JOHN R. MURPHY, from February 1, 1896, to October 17, 1899.³
- BENJAMIN W. WELLS (Acting), from October 17, 1899, to December 28, 1899.
- * AUGUSTUS P. MARTIN, from December 28, 1899, to March 13, 1902.²
- JAMES DONOVAN (Acting), from March 14 to March 17, 1902.
- EUGENE S. SULLIVAN, from March 17, 1902, to January 11, 1906.³
- WILLIAM JACKSON (Acting), from January 11, 1906, to March 1, 1906.
- WILLIAM J. WELCH, from March 1, 1906, to present time.

Assistant Water Commissioners.

- JEREMIAH J. McCARTHY, from July 1, 1895, to January 20, 1896.
- EDWARD C. ELLIS, from February 17, 1896, to November 1, 1900.
- * MELVIN P. FREEMAN, from February 7, 1900, to March 9, 1902.³
- WILLIAM H. OAKES, from November 1, 1900, to March 9, 1902.³
- EUGENE S. SULLIVAN, from March 10 to March 17, 1902.
- JOHN J. LEAHY, from March 21, 1902, to March 1, 1906.
- ISAAC ROSNOSKY, from March 10, 1902, to present time.
- JOSEPH J. NORTON, from March 1, 1906, to present time.
- JAMES P. LENNON, from March 1, 1906, to present time.

Chief Clerk.

WALTER E. SWAN.

Secretary.

JOHN J. FENENO (to January 15, 1908).

¹ Under chapter 449 of the Acts of 1895 the Boston Water Board was abolished, and the Water Supply and Water Income Departments consolidated and placed under the charge of one Water Commissioner.

* Deceased.

² Died in office.³ Resigned.

General Superintendent Income Division.

JOSEPH H. CALDWELL.

In Charge of Distribution Division.

Assistant Commissioner, JAMES P. LENNON.

City Engineer and Engineer of the Department.

WILLIAM JACKSON.



